TEXTILE TECHNOLOGY DIGEST

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ABSTRACTS

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FIBERS A

SWELLING AND SOLUTION OF FIBERS. M. Sorkin. Textil-Rundschau 12, No. 5: 249-258; No. 6: 323-333 (1957). In German. Through BCIRA 37: 505 (1957). (766)

Construction of and forces acting in filamentary molecules, and solvent systems for hydrophilic and hydrophobic fiber types are discussed. Neither the solvent systems nor the methods outlined for hydrophobic fibers enable prediction of the dissolving action with certainty.

NATURAL FIBERS A 1

COTTON SPINNERS' REQUIREMENTS. A. F. W. Coulson (R. Greg & Co. Ltd). Textile Merc. 138: 93-95 (Jan. 17, 1958). Textile Weekly 58(1): 192-193 (Jan. 17, 1958). (767)

Cotton fiber characteristics related to final yarn quality are analyzed in terms of spinning requirements.

MANMADE FIBERS A 2

DATA ON THE POLYACRYLONITRILE FIBER WOLCRYLON. L. Rudolph. Textil-Rundschau 12, No. 5: 267-270 (1957). In German. Through BCIRA 37: 472 (1957). (768)

Properties, spinning, and uses of Wolcrylon polyacrylonitrile fibers are discussed.

GERMAN PATENTS REVEAL FIBER PRODUCTION DEVELOPMENTS. Skinner's Silk & Rayon Record 32: 169 (Feb. 1958). (769)

German patents for improving methods of polymer supply to the spinning nozzle, drawing and winding filaments directly at the spinning machine, and methods for producing fibers of various shapes and with rough surfaces are briefly reviewed.

DYNEL IN KNITTED OUTERWEAR. C. A. Strodl (Union Carbide & Carbon Corp.). Textile J. Australia 32: 1089-1090 (Nov. 20, 1957). (770)

The characteristics of Dynel, which make it particularly applicable for knit outerwear, are briefly reviewed, and recommended blend percentages and processing procedures are mentioned.

CHEMICALS IN THE MANUFACTURE OF SYNTHETIC FIBERS. A. J. Hall. Fibres 19: 5-12 (Jan. 1958). (771)

In the manufacture of synthetic fibers, the chemicals required are (1) those which may be regarded as the fiber components, and (2) those which are required to assist the conversion of the polymer into fibers but which do not ultimately form part of the fiber. Synthetic fibers are classified as (1) polyamides and polyurethanes, (2) acrylics, (3) related acrylics, (4) polyesters, and (5) miscellaneous. The character and manufacture of many of the chemicals used are discussed under this classification.

FIBERS FROM COPOLYMERS AND BLENDED POLYMERS. PART 3. FIBERS OF MIXED POLYMERS. J. W. S. Hearle. Skinner's Silk & Rayon Record 32: 46-48 (Jan. 1958). (772)

The mixing of different types of polymer molecules may be considered a method of blending. This technique has probably been used in some of the commercial acrylic fibers about which details have not yet been disclosed. The structure of Zefran (called a nitrile alloy) and the structures and properties of the blends of polyacrylonitrile with cellulose acetate and silk made by D. M. Cates and H. J. White (see TTD 13: 224, 225, 401 (1956)) are discussed. Tables. Photomicrographs. 2 references.

TACRYL: DEVELOPMENT OF A SWEDISH MANMADE FIBER. O. Sunden. Melliand Textilber. 38, No. 5: 481-483 (1957). In German. Through BCIRA 37: 472 (1957). (773)

The wet spinning, properties, peculiarities, and uses of Tacryl fiber (acrylonitrile copolymer) are discussed. See also abstr. 1787 (1957).

YARN PRODUCTION B

TASLAN YARNS. Claussner Hosiery Co. Textile World 108: 108-109, 190-192 (Feb. 1958). (774)

Taslan looped yarns are made by running filament yarns through a jet of air, and they can be changed by altering the overfeed, twist, air pressure, and yarn construction. Their processing by Claussner is described. Photographs.

PROCESSING 1.0 DENIER ORLON ACRYLIC STAPLE ON THE COTTON SYSTEM. E. I. du Pont de Nemours & Co., Textile Fibers Dept., Wilmington, Del. Feb. 1958. 4 p. Bull. OR-86 (replaces Bull. OR-74). Free. (775)

SPINNING OF VINYL FIBERS. J. M. Alibert. Reyon, Zellwolle u. Chemiefasern No. 5: 339-343 (1957). In German. Through BCIRA 37: 476 (1957). (776)

Processing Fibravyl, Retractyl, and Thermovyl on long- and short-fiber spinning machines (worsted, silk, flax, and cotton spinning methods) is discussed, with reference to the individual spinning stages and to finishing and thermosetting of the yarns.

420 NYLON IN YOUR MILL. E.I. du Pont de Nemours & Co. Modern Textiles Mag. 39: 40 (Feb. 1958). (777)

Du Pont 420 nylon is a new high tenacity, semi-dull, uncrimped nylon staple having an initial modulus very similar to that of cotton. It is designed primarily for use in low percentage blends (15% to 25%) with cotton, to improve strength and durability in the resultant yarns and fabrics. Blending and processing recommendations are given.

MILL TEST PROCEDURES. PART 11. TESTS FOR BETTER WOOLEN SYSTEM YARNS. N. L. Enrick. Modern Textiles Mag. 39: 34, 60 (Feb. 1958). (778)

Purpose, equipment required, sampling, procedure, and evaluation of tests in woolen processing, including hopper feeding percentage, woolen card weigh pan variation, roping (or roving) weighing check, and jack-spool weight variation. A nomograph is provided to permit ready evaluation of weight variations without use of calculations.

CARDING AND COMBING B 2

AIR CURRENTS IN CARDS. G. Merenyi. Textile World 108: 198 (Feb. 1958). (779)

Recent carding tests made by the Budapest Technical University, Budapest, Hungary, show that the pulling force of card wire is many times greater than the force of air currents, and that fibers are transferred between cylinder and lickerin regardless of the strength of air currents.

CARDING OF CHEVIOT AND CROSSBRED SKIN WOOLS. Wool Record 93: 321, 323 (Feb. 6, 1958). (780)

Suggestions are given for dealing with carding lots composed mainly of skin wools.

DUST EXTRACTION FROM CARD ROOMS. C. V. Ward (Atmospheric Control Ltd). Textile Weekly 58(1): 167-170 (Jan. 17, 1958). (781)

Review of the recommendations made by H. M. Inspectors of Works and Factories in relation to dust in card rooms. Some comparative figures on the horsepower involved in dust extraction systems are given, and a unit designed by Atmospheric Control Ltd for adoption in the card unit is mentioned.

CALCULATION OF THE CARDING EFFECT ON ASSORTED CARDED YARNS. G. Schlese. Tex 16, No. 5: 631-641 (1957). In Dutch. Through BCIRA 37: 475 (1957). (782)

The carding process is reviewed, with reference to the individual operations and card components.

DESIGN OF VACUUM CARD STRIPPING INSTALLATIONS. A. H. Milnes (Cook & Co. Ltd). Textile Weekly 58(1): 374, 377 (Feb. 7, 1958). (783)

The criteria for choice of pump capacity, type of unit (piston, rotary, or turbo exhausters), and pipe diameters are briefly analyzed.

ANTIFRICTION COILERS FOR CARDS AND COMBERS. Saco-Lowell Shops. Saco-Lowell Bull. 29: 46-53 (Dec. 1957). (784)

Features of the coiler head, trunk, and turntable units are described. Photographs. Diagram.

STUDY OF SOME FACTORS AFFECTING THE PULLING OF RAGS. PART 3. C. D. Meyer and P. P. Townend (Leeds Univ.). Textile Mfr. 84: 64-66 (Feb. 1958). (785)

Using a Tatham one-swift card, the effect of swift speed on the percentage fiber in the shoddy was considered for various pulling considerations, e.g. feed roller speed, setting and diameter, population of swift, position of the bit box slide, bit roller setting, and, finally, for varying rates of production. Photographs. Tables. For parts 1 and 2 see abstr. 22 and 440.

DRAWING AND ROVING B 3

ADHESION AND RESISTANCE TO DRAWING. K. Schmauder. Deut. Textiltech. 7, No. 4: 241-245 (1957). In German. Through BCIRA 37: 475 (1957). (786)

Methods for determining the adhesive length (product of the mean breaking load in grams and the metric count of a sliver at a free test length of 500 mm) and the resistance to drawing (at a certain draft and count) are discussed, with reference to the respective instruments and factors affecting the results.

ANTIFRICTION TOP ROLLS FOR ROVING AND SPINNING. Saco-Lowell Shops. Saco-Lowell Bull. 29: 41-44 (Dec. 1957). (787)

Antifriction top rolls eliminate wear at the cap bars and offer less resistance to rotation under heavier top roll pressures. They are constructed of shells incorporating antifriction bearings which rotate on a stationary arbor. Diagrams. Photographs.

BIG COILERS FOR DRAWING. Saco-Lowell Shops. Saco-Lowell Bull. 29: 56-59 (Dec. 1957). (788)

Advantages and methods of changing over to 15 and 16 in. coilers are described. Photographs.

DIFFERENT EFFECTS OF TWO AUTOLEVELLERS. F. Monfort. Ann. Sci. Textiles Belges No. 1: 32-52 (1957). In French. Through BCIRA 37: 475 (1957). (789)

The mechanisms of the Speed-o-Gill Prince-Smith machine provided with the Raper autoleveller and of the Bremen adjustable draw-frame (which acts as a combing finisher, delivering the sliver on bobbins and not in cans) are described and compared, with reference to their effect on the sliver regularity.

MODERN WORSTED SPINNING PRACTICE. PART 8. RECENT TRENDS IN CONTINENTAL DRAWING. N. Roper. Textile Mfr. 83: 620-624 (Dec. 1957). (790)

Details of the Bernhardt Bremer Regel-Strecke high speed intersecting gill box, gill rubber drawing boxes, Bernhardt semi-worsted yarn system, and the Raper continental drawing system are given. Photographs. Tables. Diagram.

MILL METHOD FOR ELIMINATING THICK PLACES IN YARN. E. H. Helliwell. Textile World 108: 149, 192-194 (Feb. 1958). (791)

The use of a full-bobbin stop motion for a roving frame gives uniform yardage on bobbins and helps eliminate thick places on yarns.

SPINNING, WINDING, TWISTING B 4

FEATURES AND ADAPTABILITY OF THE WOOLEN RINGFRAME. PART 14. J. A. B. Mitchell. Textile Mfr. 84: 84-86 (Feb. 1958). (792)

In the concluding article to this series, floor space requirements, capital cost, labor requirements, and adaptability of the ring frame and mule are compared. Diagram. Table.

MODERN WORSTED SPINNING PRACTICE. PART 9. THE SPINNING PROCESS. N. Roper. Textile Mfr. 84: 57-62 (Feb. 1958). (793)

Following a discussion of the three primary spinning motions of drafting, twist insertion, and winding-on, worsted spinning on flyer, cap, and ring spinning frames is described. Detailed descriptions are given of the dead spindle and revolving spindle flyer frames, and the Magnum, Parawind, and Velox ring frames. Photographs. Diagrams.

ROBBINETTE RINGS. Saco-Lowell Shops. Saco-Lowell Bull. 29: 13-15 (Dec. 1957). (794)

The distinctive features of these new rings with the Robbinette finish are the ultra-smooth surface and durable polish. The Robbinette finish lowers the barrier to higher production imposed by the limitations of practical traveler speeds. Photographs.

PNEUMATIC BROKEN-END COLLECTORS. C. Becker. Reyon, Zellwolle u. Chemiefasern No. 5: 335-339 (1957). In German. Through BCIRA 37: 476 (1957). (795)

Various suction systems on spinning machines are described and compared (Pneumafil, Thomatex, Carthomat, etc.).

WHAT THE TWISTER SHOULD KNOW WITH REGARD TO THE CALCULATION OF TWIST, CHANGE OF TWIST, AND RATCHET WHEELS. A. Beck. Z. ges. Textil-Ind. 59, No. 10: 388-389 (1957). In German. Through BCIRA 37: 477 (1957). (796)

PNEUMATIC BROKEN-END COLLECTION. Carrier Eng. Co. Ltd. Textile Weekly 58(1): 378, 395 (Feb. 7, 1958). (797)

Pneumafil and Pneumaroll on ring frames. The advantages of each system are cited.

ANTIFRICTION TOP SUSPENSION FILLING SPINDLES. Saco-Lowell Shops. Saco-Lowell Bull. 29: 62-64 (Dec. 1957). (798)

The top suspension spindle is a new development in that the quill contacts and is driven by the blade at the top rather than in the conventional manner of driving at the acorn. Higher uniform yarn tensions and increased spindle speeds can be attained. Diagrams.

NEW HISPANO-SUIZA SPINDLE SYSTEM. Hispano Suiza (Suisse) SA. Man-Made Textiles 34: 62 (Feb. 1958). (799)

The outstanding feature of the new direct-driven spindle which Hispano Suiza has recently developed for high-production ring spinning and doubling frames is the transmission of the drive, not direct to the spindle shaft, but through the medium of a hollow shaft in which the spindle shaft is enclosed. As the two shafts are carried in separate bearings, the design has the advantage that neither axial nor radial components of the driving force likely to upset the central positioning and the smooth and vibrationless running of the spindle are transmitted to its shaft. Diagrams.

GWALTNEY SPINNING FRAME DRAFTING ASSEMBLIES. Saco-Lowell Shops. Saco-Lowell Bull. 29: 16-27 (Dec. 1957). (800)

Each of the eight different standard drafting assemblies for the Gwaltney frame is designed to cover a specific range and to suit mill needs for processing fibers from 7/8 in. to 9 in. in staple length. Basically, the three long draft drafting systems, the Shaw, the Duo-Roth, and the SS-4, are used. Data and specifications covering each of these drafting assemblies are presented. Diagrams.

YARN TENSIONS DURING TWISTING. F. Fourné. Melliand Textilber. 38, No. 5: 488-492; No. 6: 602-605 (1957). In German. Through BCIRA 37: 476 (1957). (801)

Equations are given for determining the thread tension in the balloon, with and without air resistance, on twisting machines with several rows of bobbins, and the tension between cop and ring on ring- and cop-twisters and double-twist twisting machines. The thread tensions can also be obtained from nomograms, in dependence upon unwinding- and ring-diameter, balloon height, spindle speed, weight of traveler, etc., the values showing sufficient agreement with those obtained by measurement.

YARNS B 5

STRAIN IN A HIGH-TENACITY RAYON AS A FUNCTION OF TIME, ELONGATION, AND RELATIVE AIR HUMIDITY. W. Wegener and B. Duchene. Reyon, Zellwolle u. Chemiefasern No. 6: 424-428 (1957). In German. Through BCIRA 37: 523 (1957). (802)

The strain in a high-tenacity rayon, stressed permanently according to the principle of constant elongation, was determined in dependence of time, elongation, and relative air humidity in two series of experiments. In the first, the yarn was uniformly stretched and, in the second, the deformation occurred in dependence of the velocity of a dropping weight. The results are shown in steric phase diagrams and interpreted.

HIGH BULK AND CRIMP YARNS. SVF Fachorgan Textilveredlung 12, No. 5: 294-362 (1957). In German. Through BCIRA 37: 477 (1957). (803)

This special edition consists of 19 articles with a bibliography of 62 references.

STRETCH AND BULK YARNS. M. H. Gurley, Jr. Modern Textiles Mag. 39: 31, 50, 57 (Feb. 1958). (804)

The development, characteristics, processing, uses, and future potentials of stretch and bulk yarns are discussed.

SPLICING CARPET YARNS OF DU PONT NYLON. E. I. du Pont de Nemours & Co., Textile Fibers Dept., Wilmington, Del. Jan. 1958. 3 p. Bull. N-106 (replaces Bull. N-88). Free. (805)

A technique and splicing compounds are suggested for an improved nylon carpet yarn splice.

FABRIC PRODUCTION C

WARPING, SLASHING, YARN PREPARATION C 1

MAINTENANCE CHECKLIST FOR SPOOLING AND WARPING. J. E. Allen. Textile World 108: 200 (Feb. 1958). (806)

HEAVY DUTY PRECISION WINDER. Thomas Holt Ltd. Textile Recorder 75: 87 (Feb. 1958). (807)

Model PU is a large package cone and cheese winder for winding carpet and other heavy yarns spun from cotton, rayon, wool mixtures, and jute. Its features are described. Photographs.

SOME ASPECTS OF MODERN WARP SIZING. H. Hacking. Textile Mfr. 84: 73-76 (Feb. 1958). (808)

The sizing of cotton yarns and yarn spun from rayon or synthetic fibers (or blends) is considered under the following: (1) examination of the control of size percentage in normal Lancashire slashing rooms; (2) control of sizing by means of the Shirley automatic size box, including use of slurries and the dry-feed attachment; (3) a brief comparison of the Shirley box with other modern control methods; (4) sizing materials; and (5) brief comments on high production slashing machinery. Tables. Photographs.

WINDING OF COPS ON CROSS-BOBBIN WINDERS. H. Eigenbertz. Z. ges. Textil-Ind. 59, No. 13: 502-507 (1957). In German. Through BCIRA 37: 510 (1957). (809)

Possibilities of increasing the unwinding rate on winding machines are reviewed, with special reference to the mechanism of the unwinding accelerator (developed by W. Schlafhorst & Co.) on the BKN cone winder. Among the advantages of the accelerator are enumerated: savings of capital, space, etc.; maintenance of yarn elasticity; reduction of yarn breakages, knots in the fabric, impurities and waste; production of soft packages for dyeing.

WARPING QUALITY CONTROL AID FOR WARP KNITTING. J. B. Lancashire. Hosiery Trade J. 65: 94-95 (Jan. 1958). (810)

The HS yarn tensioning device (H. Stanier & Co. Ltd) is a control mechanism of high sensitivity which enables a low and uniform tension to be applied during the warping operation. It is adaptable for use on almost all types of jack and magazine creels, and in connection with both direct and indirect warping. Constructional and operating details are given. Photographs. Diagrams.

ECONOMY IN THE WEFT WINDING ROOM. G. Hain. Deut. Textiltech. 7, No. 4: 246-248 (1957). In German. Through BCIRA 37: 481 (1957). (811)

Automation in the weft winding room is discussed, with reference to automatic weft winding and winding machines with vertical and horizontal spindle arrangement. Since the output of an automatic winder is greatly affected by the size of the supply packages, it is recommended that the material should be rewound first on to large packages.

BARBER-COLMAN SPOOLER CUTS YARN HANDLING. Textile Inds. 122: 69-70 (Jan. 1958). (812)

This Barber-Colman spooler is basically a type C spooler. Its unique features include large bobbin pockets to permit use of large packages from spinning, reduced handling by using special bobbin boxes which are placed at the spooler in place of the usual bobbin troughs, and cheese feelers which control cheese size accurately. Reduced handling of bobbins is an important advantage permitted by the new arrangement.

YARN BRAKES AND THREAD GUIDES ON MULLER NK5 WINDING MACHINES. E. Löhmer. Melliand Textilber. 38, No. 5: 501-503 (1957). In German. Through BCIRA 37: 481 (1957). (813)

Examples are given of yarn brakes in which the thread tensioning is effected by weight discs, with special reference to the universal yarn brake with infinitely adjustable thread tension.

GILBOS HANK CHEESE WINDER, UC-TYPE. Melliand Textilber. 38, No. 5: 499-500 (1957). In German. Through BCIRA 37: 481 (1957). (814)

The high capacity cheese winder of the Belgian firm Gilbos for winding from hank to cone is described and illustrated. Characteristic features of this machine are a mechanism for preventing "figure-winding" on the bobbin and braking means for eliminating yarn breakages.

WEAVING C 2

OPEN-SHED JACQUARD MACHINE. Peter Walker Ltd and James McMurdo Ltd. Textile Recorder 75: 89 (Feb. 1958). (815)

This new jacquard is a double-lift machine with single cylinder, but the wirework is specially designed for open shed weaving and does not have the disadvantages of the orthodox single cylinder machine, no strain at all being put on any of the hooks. Photograph.

MAXBO COMPARED WITH CONVENTIONAL LOOMS. V. Duxbury. Skinner's Silk & Rayon Record 32: 151-152 (Feb. 1958). (816)

Impressions of the Swedish Maxbo shuttleless loom are given in question and answer form.

FINE FILAMENTS OR COARSE COUNTS ON THOUMIRE LOOM. Skinner's Silk & Rayon Record 32: 149 (Feb. 1958). (817)

Weft insertion details of the French rapier loom are described. Diagrams.

UNCONVENTIONAL LOOMS. PART 3. RAPIER AND THE WATER JET PRINCIPLES. G. Turton. Man-Made Textiles 34: 44-46 (Feb. 1958). (818)

The construction and operation of the Gentilini-Ripamonte loom (rapier principle) and the Kovo loom (water jet principle) are described. Photographs. Diagrams. Table.

MALFUNCTIONING LOCK KNIVES CAUSE BENT VIBRATOR LEVERS. Crompton & Knowles Corp. Am. Textile Reptr. 72: 10, 35 (Feb. 6, 1958). (819)

Malfunction of the lock knife, due to poor settings or adjustment, is undoubtedly the major cause of the trouble that some mills have been experiencing with bent vibrator levers. Diagrams showing some of the conditions under which vibrator levers are subjected to sufficiently abnormal loads to cause them to bend are given. Causes of this problem are discussed, and suggestions for its elimination are made. Diagrams. Photograph.

RAPID DETECTION OF BROKEN ENDS ON THE LOOM. L. Mallet. Industrie Textile: 371-372 (May 1957). In French. Through BCIRA 37: 483 (1957). (820)

The special slotted dropper described is relatively cheap and can be mounted not only on electrical but also on mechanical warp stop motions.

SHUTTLELESS LOOM DEWATEX. J. Caumont. Industrie Textile: 373-374 (May 1957). In French. Through BCIRA 37: 482 (1957). (821)

The characteristics and mechanism of the Dewatex shuttleless loom are described. The weft selection device is of very simple design and construction, using a perforated card. Up to eight weft threads, supplied by large conical bobbins arranged at the side of the loom, can be selected and inserted in any order. The loom operates noiselessly and without vibrations.

PICKER FOR OVERPICK LOOMS. A. Haag. Melliand Textilber. 38, No. 5: 510-511 (1957). In German. Through BCIRA 37: 482 (1957). (822)

The picker described is characterized by a curved part for fixing the picking strap. This shape, as compared with the straight picker, makes it possible to fix the strap nearer to the picker spindle axis and, thus, to effect better distribution of the forces, reducing the pressure and friction at the bore holes and prolonging the life of the picker.

DOBBY FOR WIDE LOOMS WITHOUT SUPERSTRUCTURE. Z. ges. Textil-Ind. 59, No. 12: 480-481 (1957). In German. Through BCIRA 37: 482 (1957). (823)

Constructional details are given of the closed-shed dobby with return motion developed by the Maschinenfabrik W. Brock Söhne (Ger. Pat. 915 800).

STUDY OF WARP AND FILLING ONDULE. W. E. Tarrant (Clemson Coll.). Bobbin and Beaker 16: 19-26 (Winter 1958). (824)

The objective of this study was to produce filling ondule from one beam using a new and simpler method and to produce warp ondule from one beam without using reeds and complicated attachments. Diagram. References.

MASS COUNTING SYSTEM ANALYZES LOOM OPERATIONS. Textile World 108: 102-103 (Feb. 1958). (825)

This Auto-Count electronic mass counting system in its simplest form is a centralized pick counter. Data on (1) the looms stopped, the loom numbers of the stopped looms, and the duration of each stop; (2) the loom speed of each loom in the group and fluctuations of speed within 0.25 ppm; and (3) the total individual production of each loom in the group may be obtained by its use. The mechanics of a mass counting system in the weave room are described.

ELEMENTS AND UNITS FOR SHED FORMATION. J. Schneider. Z. ges. Textil-Ind. 59, No. 8: 287-291; No. 9: 352-355; No. 10: 386-387 (1957). In German. Through BCIRA 37: 482 (1957). (826)

Shed formation devices for treadle-motion looms, dobby looms, and jacquard machines are described and illustrated.

ELECTRONIC WEFT FEELER. R. Hünlich. Melliand Textilber. 38, No. 5: 511 (1957). In German. Through BCIRA 37: 483 (1957). (827)

In the weft feeler described, the light emitted from a feeler head fixed on the lay scans the pirn after each weft insertion. When the pirn is empty, the beam is reflected to a sensitive semiconducting element which converts the light impulses into electric current impulses, the latter operating the stop or change motion.

KNITTING C 3

DOUBLE JERSEY FABRICS. J. B. Lancashire. Knitter 22: 31-34 (Feb. 1958). (828)

CHELL MODEL C TWIN-FEED SEAMLESS HOSIERY MACHINE. I. R. Thornton. Hosiery Trade J. 65: 98-100 (Jan. 1958). (829)

The model C is a twin-feed machine capable of producing seamless hose in either plain knit or micromesh. Features include lace patterned shadow welt, Y-heel, and Demi toe, with delayed slack course and under-toe linking. Points of special interest are the provisions for a lace pattern in the welt, a picot edge, and the construction of the Demi or Ballet toe, which enables the mesh pattern to continue up to the toe reinforcement. Photographs.

LUBRICATING PRACTICES FOR TRICOT MACHINES. J. A. Wertman. Textile World 108: 204 (Feb. 1958). (830)

BERG PRECISION THREAD DETECTOR FOR CIRCULAR KNITTING MACHINES. Skinner's Silk & Rayon Record 32: 157 (Feb. 1958). (831)

The Berg yarn detectors not only indicate yarn breaks but also show when the tension buildup has reached a predetermined point. Photographs.

SINGLE PURPOSE GARMENT-MAKING UNIT. Wildman Jacquard Co. Hosiery Trade J. 65: 93 (Jan. 1958). (832)

The model AI circular knitting machine knits garment lengths with 1/1 rib end and interlock body. It has a needle cylinder 32 in. in diameter and is equipped with 32 knitting feeders. In addition there are four feeders to facilitate garment manufacture and separation. Features and operation of the unit are briefly described. Photograph.

FABRIC SHAPING ON V-TYPE KNITTING MACHINES. J. B. Lancashire. Textile Recorder 75: 67-68 (Feb. 1958). (833)

Besides possessing exceptionally wide scope for developing fancy effects in stitch and color, V-type flat knitting machines are able to produce shaped fabrics, both tubular and selvaged. Shaping done (1) by changing the character of the stitch, (2) by increasing and decreasing the number of knitting needles, (3) by varying progressively the number of stitches in a succession of wales, and (4) by racking is described.

FAULTS IN WARP KNITTED FABRICS. PART 1. DEFECTS TRACEABLE TO YARN AND WARPING. Hosiery Trade J. 65: 82-84 (Jan. 1958). (834)

Among the sources of defects in warp knit fabrics are denier variation, mixing of two different merges, yarn deterioration during storage, inefficient steaming and bad winding of uptwisted yarns, size or oil deficiency, and inferior warping.

FABRICS C 4

DEVELOPMENT OF MODERN FABRICS. H. Kox. Melliand Textilber. 38, No. 5: 515-520 (1957). In German. Through BCIRA 37: 483 (1957). (835)

The possibility of producing fabrics whose properties meet the requirements of hygiene and physiology and may even have therapeutic value (antiallergic and antirheumatic) is discussed, and illustrated by ten practical examples.

NEW PROCEDURES OF MANUFACTURING LOOPED AND TUFTED FABRICS. Inst. Textile de France. Bull. Inst. Textile France No. 66: 105-121 (Apr. 1957). In French. Through BCIRA 37: 511 (1957). (836)

Review of the literature. 32 references.

WOVEN FABRIC STRUCTURE: FANCY DIAGONAL PATTERNS. D. C. Snowden. Man-Made Textiles 34: 47 (Feb. 1958). (837)

DESIGN IN WOVEN STRUCTURE. PART 62. MORE DESIGNS USING SMALL REPEAT STEEP TWILL WEAVES. D. C. Snowden. Wool Rev. 31: 40-41 (Feb. 1958). (838)

HOW TO USE METALLIC YARNS IN TUFTED FABRICS. Dobeckmun Co. Textile Inds. 122: 145, 149 (Feb. 1958). (839)

Suggestions for more efficient processing of Lurex yarns for tufting, as well as bleaching and dyeing recommendations for tufted fabrics containing metallic yarns, are briefly listed. Diagrams.

WEAVING AND CUTTING FACE CLOTHS FROM TERRY FABRICS. T. Hargreaves. Textile Mfr. 84: 80-81 (Feb. 1958). (840)

The customary method of weaving the inner selvages of terry fabrics intended for face cloths and woven side by side on a loom is described, as well as methods for separating the cloths both at the loom and away from it.

BONDED FIBER FABRICS. Textiles in Ind. 3: 13-14 (Jan./Feb. 1958). (841)

This article briefly discusses the uses and special advantages in some industrial applications of bonded fiber fabrics. Photographs.

TEXTILES IN INDUSTRIAL BELTING. Textiles in Ind. 3: 3-9, 14, 17 (Jan./Feb. 1958). (842)

Belting survey: V-belts, flat transmission, and conveyor belting; Rilflex colliery belting based on Terylene; nylon in conveyor belts. Photographs.

WHAT FUTURE FOR SYNTHETIC FIBER PAPER? T. Palfreyman. Skinner's Silk & Rayon Record 32: 134-135 (Feb. 1958). (843)

The main steps in the manufacture of synthetic fiber paper are outlined and the commercial applications discussed. Photographs.

THIRD ARM OF TUFTING: NEW HORIZONS WITH RUGS. Rivington Carpets. Man-Made Textiles 34: 50-51 (Feb. 1958). (844)

Some techniques used in the manufacture of scatter rugs are described. Photographs.

FABRICS CONTAINING COTTON-TYPE TERYLENE. H. A. Hargreaves. Fibres 19: 19-20 (Jan. 1958). (845)

In considering the merits of blending Terylene with cotton for apparel fabrics, the disadvantages and advantages of each are examined. To reduce the defects existent in 100% Terylene to a tolerable level for apparel outlets, the most commonly used blend is 67% Terylene/33% cotton. This proportion of cotton increases absorbency, reduces the level of static, accelerates the rate at which static charges leak away from the cloth, and contributes to handle. However, particular blend compositions will probably be developed for specific end-uses in order to emphasize properties having the greatest significance.

MILL STANDARDS FOR CONSUMER ACCEPTANCE. A. R. Wachter (Am. Viscose Corp.). Can. Textile J. 75: 45-48 (Jan. 24, 1958). (846)

The history and development of the American Standards Association's Minimum Requirements for Acetate and Rayon Fabrics (ASA L22) are described. The meaning of the AVISCO label is explained in terms of this standard.

ACRYLIC FIBER BLANKETS. Hollins Mill Co. Ltd. Man-Made Textiles 34: 38-40 (Feb. 1958). (847)

The characteristics of acrylic fibers for blanket use and the weaving of the blankets are described. Photographs. Swatch.

STRENGTH-AFFECTING FACTORS DURING PRODUCTION AND USE OF NET CURTAINS. K. Schollain. Deut. Textiltech. 7, No. 4: 249-253 (1957). In German. Through BCIRA 37: 483 (1957). (848)

Means for improving the strength properties of net curtains are discussed, taking into account the material, weave, tension, etc.

DEGRADATION OF COTTON BY HEAT. M. Aubry. Bull. Inst. Textile France No. 66: 53-66 (Apr. 1957). In French. Through BCIRA 37: 524 (1957). (849)

It is shown that the action of heat on cellulosic fibers in general and cotton in particular causes an increase in the number of hydrogen bonds, oxidation (starting probably at a fairly high temperature of 140° C), hydrolytic degradation due to the presence of water vapor, and pyrolysis of the cellulose which is assumed to take place at high temperatures and is expressed by reduced solubility of the cellulose in cuprammonium. 37 references.

MIXED YARNS FROM WOOL AND CHEMICAL FIBERS. PART 7. FELTING AND SHRINKING ABILITY OF BLENDS FROM WOOL AND SYNTHETIC FIBERS (PERLON, DRALON, DIOLEN). H. Zahn and E. Kratzsch. Melliand Textilber. 38, No. 5: 559-563 (1957). In German. Through BCIRA 37: 500 (1957). (850)

Knitted fabrics of Perlon/wool, Dralon/wool, and Diolen/wool were milled by hand 10 times at 45° C with soap-soda solution for 15 min to measure the percentage area-shrinkage (calculated in relation to the extent of relaxation shrinkage) after the treatment and to compare the degree of felting. All blended yarns show decreasing felt-shrinkage with increasing amount of the synthetic-fiber component, 40-60% of the latter being necessary for an effective improvement. The felt-shrinkage increases in all blended yarns with increasing duration of milling. The Perlon/wool blends show a higher degree of felting and area-shrinkage than the corresponding Dralon/wool and Diolen/wool blends; this is attributed to the difference in the hydrophobic behavior of synthetic fibers.

QUALITY SUITINGS IN VISCOSE STAPLE AND WOOL. J. M. Cysarz. Man-Made Textiles 34: 48-49 (Feb. 1958). (851)

Properties, processing characteristics, and specialty uses of some viscose/wool blends are described. Swatches.

COMPARATIVE STUDY OF THE BEHAVIOR OF INACTIVATED COTTON AND SOME OTHER TEXTILE FIBERS TO HIGH TEMPERATURES. R. Sprecklin. Bull. Inst. Textile France No. 66: 67-94 (Apr. 1957). In French. Through BCIRA 37: 524 (1957). (852)

Resistance of fabrics from partially acetylated cotton and from other untreated natural and synthetic fibers to dry hot air (140-190° C) over a prolonged period is examined and it is shown that, under identical conditions, the partially-acetylated cotton exhibits a distinctly higher resistance to heat degradation than untreated cotton.

FINISHING AND CHEMICAL PROCESSING D

OPEN-WIDTH WET TREATMENT OF FABRICS FROM NATIVE AND REGENERATED CELLULOSE. Melliand Textilber. 38, No. 5: 565-566 (1957). In German. Through BCIRA 37: 487 (1957). (853)

The characteristics of (1) the wet-treatment installation developed by the Lindauer Dornier GmbH, (2) the high-temperature steamer for continuous open-width dyeing (Rudolph construction), and (3) a dyeing unit, Cellarius system (Ger. Pat. 949 645), are described.

FABRIC DEFECTS IN WOOL FINISHING. PART 3. PIECE DYEING, TOP DYEING, BACKWASHING. R. G. Stoehr. Textile Inds. 122: 122-125 (Feb. 1958). (854)

Causes and cures for defects resulting from piece dyeing, top dyeing, and backwashing are discussed. Photographs.

HOW TO DYE DACRON TASLAN CLOTH. E. I. du Pont de Nemours & Co. Modern Textiles Mag. 39: 44, 46 (Feb. 1958). (855)

Scouring procedures for waxed and unwaxed yarns, heat setting, bleaching, dyeing, and finishing are discussed. Finishing sequences covering fabrics for dress shirts, sport shirts, and blouses are listed.

INDUSTRIAL USES OF CARBOXYMETHYLCELLULOSES. O. Wurz and E. Wurz. Textil-Rundschau 12, No. 5: 259-267 (1957). In German. Through BCIRA 37: 482 (1957). (856)

A review with 31 references. The carboxymethylcellulose product referred to is the Austrian product Polyfibron.

CHEMICAL PROCESSES D 1

IMPROVING THE TEXTILE QUALITIES OF COTTON. B. C. M. Dorset. Textile Mfr. 84: 90-94 (Feb. 1958). (857)

The chemical reactivity of cotton and implications of its modification with olefinic compounds such as cyanoethylation with acrylonitrile and carbamoylethylation with acrylamide are discussed. Properties conferred on the treated fabrics are also noted. References.

TEXURIM TREATMENT ELIMINATES WARP KNIT SELVAGE CURLING. Martin Mahler KG. Skinner's Silk & Rayon Record 32: 160 (Feb. 1958). (858)

Texurim can be diluted to any required consistency and when it is applied and allowed to dry the cloth remains quite flexible with sufficient stiffening to combat selvage curling. The stiffening is resistant to all washing compounds and most chemicals, particularly those used in dry cleaning. It is also heat resistant to temperatures up to 210° C. Photographs.

WILLIAMS-SELLERS COMBINED MILLING AND SCOURING MACHINE. D. R. H. Williams. Textile Mfr. 84: 87-88 (Feb. 1958). (859)

The features of this 60 in. machine capable of doing the work of at least one ordinary scouring machine, two wringing machines, and two to three milling machines are described. See also abstr. 468 (1957).

PROBAN: DURABLE ANTIFLAME FINISH FOR FABRICS. Textiles in Ind. 3: 10, 17 (Jan./Feb. 1958). (860)

The development of Proban finish (based on THPC) is described, and its potential uses in industry described.

FLAMEPROOFING OF TEXTILE MATERIALS. J. A. Somers. Textile Recorder 75: 72-74 (Feb. 1958). (861)

A review of recent progress.

PROTECTION OF TEXTILES AGAINST MOTH, INSECTS, AND TERMITES. J. Salquain. Teintex 22, No. 4: 279-291; No. 5: 374-387; No. 6: 443-455; No. 7: 522-539 (1957). In French. Through BCIRA 37: 518 (1957). (862)

In this review the author discusses destruction of micro-organisms; attack of textiles by moth, insects, and termites; biological, mechanical, and chemical methods of protection; and modification of the chemical composition of natural fibers to render them immune to the attack of these organisms. 113 references.

WATERPROOFING OF TEXTILES. P. Rochas. Teintex 22, No. 5: 349-374 (1957). In French. Through BCIRA 37: 518 (1957). (863)

In this review the author discusses some theoretical aspects of reactions between the water and textile materials, methods of waterproofing and rendering the fabrics water-repellent, and methods for testing the water-impermeability of textiles. 20 references.

SMITH AUTOBLEACH MACHINE. F. Smith & Co. Ltd. Can. Textile J. 75: 72-73 (Feb. 7, 1958). (864)

The Autobleach machine is a single-stage unit which can be used for caustic soda, peroxide, or sodium chlorite treatments. This arrangement offers economic advantages in that the isolation of the scouring and bleaching processes enables much shorter cloth runs to be handled and the bleaching process can in most cases be speeded up considerably. It is claimed possible to clear even the most heavily seeded cotton fabric with a 40 min. caustic scour in the Autobleach coupled with a chlorite or peroxide bleach of an even shorter duration. Photograph.

FUTURE OF WOOL WET PROCESSES. L. Bellwood. Textile Merc. 138: 267-269 (Feb. 14, 1958). (865)

A lecture reviewing the scouring and milling of wool fabrics in relation to present and future developments.

PRACTICAL CAUSES OF THE CHEMICAL DEGRADATION OF RAYONS AND PROPERTIES OF THE DEGRADED CELLULOSES. C. J. Pinte. Bull. Inst. Textile France No. 66: 15-39 (Apr. 1957). In French. Through BCIRA 37: 524 (1957). (866)

Physicochemical structure of cellulose, new chemical groups formed as a result of degradation, and tests for the evaluation of the changes in degraded rayon are reviewed, with special reference to the formation of hydrocelluloses and oxycelluloses. The formation of the latter is caused, in particular, by industrial bleaching processes with hypochlorite, hydrogen peroxide, and chlorite, and can be catalyzed by traces of metals or oxidizing reaction products and acids formed by the polymerization of linseed oil present on the rayon. The effects of these factors on the physicochemical properties of the degraded celluloses (reduced mechanical strength, tendency to yellowing, etc.) are discussed.

EFFECT OF IRON AND COPPER CONTAMINANTS ON COTTON DEGRADATION IN PEROXIDE BLEACHING. AATCC Southeastern Sect. Am. Dyestuff Reptr. 47: P79-P83 (Feb. 10, 1958). (867)

An investigation of the degrading effects of certain heavy metals, their oxides, hydroxides, and salts, when present during peroxide bleaching of cotton yarns, was conducted. Tests were made in which the cotton yarns were impregnated with the contaminant before bleaching and in which the contaminants were placed in the bleach bath. The effects of degradation were measured by means of skein breaks and cupriethylenediamine fluidity measurements. The following results were noted for the samples studied: (1) the presence of metal contaminants is not necessarily a danger to cotton, (2) the form in which the metal is present as a contaminant is an important factor in its degrading effect on cotton, and (3) ferrous sulfate appears to be the greatest source of danger in peroxide bleaching of the materials tested. Graphs. Tables. 18 references.

RANGE OF GIRLAND PLASTICIZERS--NEW SAMPLING MACHINE. Andrew Eng. & Development Co. Ltd. Dyer 119: 125 (Jan. 17. 1958). (868)

Improvements in the range of Girland plasticizers, including heater units for postboarding the heavier weights of nylon, Terylene, and Agilon hose and half-hose, and the fitting of various types of temperature control equipment are described, and the Girland range briefly reviewed.

FORMALDEHYDE: AN IMPORTANT REAGENT IN THE TEXTILE INDUSTRY. E. Vigneul. Industrie Textile: 383-389 (May 1957). In French. Through BCIRA 37: 489 (1957). (869)

In this review, the author discusses properties of formaldehyde, formaldehyde content in aqueous solutions in dependence of their density, reactions of formaldehyde leading to the formation of hydrated $(CH_2O)_n.H_2O$ and true $(CH_2O)_n$ polymers, chemical action of formaldehyde on cellulosic fibers, and determination of formaldehyde.

EFFECT OF DECHLORINATION, AFTER HYPOCHLORITE TREATMENT, ON THE DEGRADATION OF FABRICS BY REPEATED BLEACHING. A. Fresco and A. Parisot. Bull. Inst. Textile France No. 66: 8-14 (Apr. 1957). In French. Through BCIRA 37: 513 (1957). (870)

The degradation of cotton and linen fabrics subjected to a series of washing and hypochlorite bleaching treatments under industrial conditions was examined by determining the degree of polymerization and measuring the bursting strength of the fabric, dry and wet. Sodium metabisulfite was found to be an excellent dechlorinating agent causing no supplementary degradation of the fabric. Provided that drying is effected immediately after bleaching, the traces of sodium hypochlorite remaining in the fabric after incomplete rinsing are without appreciable effect on the fabric. If, however, this fabric is stored in air for some time, it is necessary to remove the sodium hypochlorite either by prolonged rinsing or by dechlorination.

RELATION OF THE EFFECT OF RESINS ON LIGHT FADING AND THE TENDERING ACTION OF PHOTOSENSITIVE VAT DYES. AATCC. Piedmont Sect. Am. Dyestuff Reptr. 47: P39-P48 (Jan. 27, 1958). (871)

Since publication of the first paper on this subject (see TTD 13: 572 (1956)), it has been found that there is a correlation between the vat dyes which lose lightfastness after resin treatment and those dyes which show photo-tendering of cellulose. The same dyes generate peroxide on exposure to light and, where the tests have been made, exhibit both phenomena. The loss in lightfastness after resin treatment has been counteracted for these dyes by addition of an inhibitor to the resin bath. It has also been found that the fading effect is not limited to resins containing the $-NCH_2OH$ grouping. Additional vat dyes have been studied and a few more sensitive to fading after resin treatment had been found. Study of additional catalysts and variations in the conditions of the resin treatment show that the effect of the resin on lightfastness is due primarily to the presence of the resin. Tables. Graphs. 19 references.

NEUTRALIZATION OF ACID-TREATED WOOL BY SOLUTIONS OF SODIUM CARBONATE. R. P. Harker (Wool Inds. Research Assoc.). J. Soc. Dyers Colourists 73: 554-560 (Dec. 1957). (872)

Neutralization of acid-treated wool by solutions of sodium carbonate has been examined by measurement of hydrogen-ion concentrations. The effects of concentration, time, liquor ratio, and temperature on the equilibration process have been studied. A qualitative interpretation of results is given, and a quantitative treatment employing the Donnan theory of membrane equilibria has been examined. Graphs. 26 references.

DYEING AND PRINTING D 2

DU PONT LN DYEING PROCESS. Dyes & Chem. Tech. Bull. 13: 172-173 (Dec. 1957). (873)

A new dyeing process which minimizes the barre problem when acid dyes are applied to nylon filament has been developed. This process is supplemental to the known Duponol D Paste procedure and is especially recommended for use in the temperature range of 205° to 212° F. However, the Duponol D Paste procedure is still more effective at temperatures above 212° F.

PRACTICAL EXPERIENCE WITH PROCIONS. Skinner's Silk & Rayon Record 32: 164 (Feb. 1958). (874)

The chemical behavior of Procion dyes with cellulose, and methods for dyeing and printing are briefly described. Two swatches showing a printing and a dyeing are included. Formulas.

MAIFOSS DYEING PROCESS. J. I. Harding (Maifoss Ltd). Textile Merc. 138: 213-214 (Feb. 7, 1958). (875)

The Maifoss process is a combination of chemical treatment with dyeing which may be used to produce the following effects: (1) an evenly spaced melange effect, (2) a mixture effect where there is a greater proportion of white giving wider spacing, (3) a tone-on-tone effect, (4) a two-color contrast effect, and (5) a three-color effect or two colors and white. The effect on hand and wearing properties of wool and the cost of processing are briefly mentioned.

DYEING OF ZEFRAN AND BLENDS CONTAINING ZEFRAN. A. S. Messer (Dow Chem. Co.). Am. Dyestuff Reptr. 47: P84-P92 (Feb. 10, 1958). (876)

Ease as well as versatility in dyeing is seen in the ability of Zefran (nitrile alloy fiber) to be dyed with the dyes for cellulosic fibers, as well as with the neutral premetalized dyes for wool. The procedures for application closely approximate those used for the natural fibers; commercial runs as well as rate studies bear this out. For the most part, unions of Zefran with the cellulosic fibers or wool are carried out as a one-bath operation in normal dyeing cycles through dye selection, temperature regulation, and reserving agent. Continuous dyeing and printing may also be carried out. Graphs.

DYEING OF WOOL/SYNTHETIC FIBER UNIONS. E. Bellhouse (Geigy Co.). Dyer 119: 201-204 (Jan. 31, 1958). (877)

Washfast shades on wool/polyamide, wool/polyacrylonitrile, and wool/polyester yarns and fabrics.

NEW APPROACH TO CELLULOSE DYEING. C. D. Weston. Dyer 119: 175 (Jan. 31, 1958). (878)

Methods for application of Procion dyes to cellulose fabrics and fastness properties of the dyeings are briefly summarized.

CROSS-DYEING ARNEL MIXTURES. R. G. Stoll (Celanese Corp.). Modern Textiles Mag. 39: 42, 48 (Feb. 1958). (879)

Fabrics containing Arnel triacetate fiber can now be cross-dyed when the Arnel in the fabric is combined with acetate-rayon or acetate-cotton. Dyeing principles, effects of yarn and fabric construction, and colorfastness levels attainable are discussed.

ADVANCES IN WOOL DYEING. G. G. Simpson. Dyer 119: 93-94 (Jan. 17, 1958). (880)

Improvements in dyeing of wool at high temperature, the du Pont loose wool dyeing method, the ICI method for the dyeing of pile fabrics, solvent dyeing of wool, the Carbolan Salt A method, and the classification of chrome dyestuffs in terms of level dyeing properties are discussed briefly.

FAST DYES ON CELLULOSIC FIBERS. T. Vickerstaff (Imp. Chem. Inds. Ltd). Am. Dyestuff Reptr. 47: 33-38 (Jan. 27, 1958). (881)

The theoretical aspects of the application of reactive dyes (e.g. Procion dyes) to cellulose fibers and the implications in terms of practical dyeing methods are examined. Graphs. Tables. Photomicrographs. 2 references.

PROCEDURES FOR APPLYING LATYL DIAZO BLACK B TO DACRON, ACRILAN, NYLON, AND ACETATE. Dyes & Chem. Tech. Bull. 13: 181-190 (Dec. 1957). (882)

The use of developed blacks is of interest because they are economical and yield a high degree of fastness. However, the application procedures must be carefully followed to obtain the correct shade and fastness properties. A review of the best dyeing method for each fiber is presented. Tables.

POLYESTER FIBERS: DYEING AND FINISHING. H. Blättermann, R. Koch, and H. Meier. Z. ges. Textil-Ind. 59, No. 11: 424-430 (1957). In German. Through BCIRA 37: 487 (1957). (883)

Preparation and properties of polyester fibers, suitable dyes and dyeing methods (use of dyeing accelerators and high temperature dyeing), and fixing of polyester fibers are discussed, and tables are given listing the fastness properties of some Resolin dyeings, carried out, respectively, at high temperatures and in the presence of Levegal PT accelerator. Reference is also made to the possibility of producing colored and white effects on polyester/cellulosic fiber blends with a selection of Sirius and Indanthrene dyes.

STUDIES IN HYDROGEN-BOND FORMATION. PART 6. THE ROLE OF HYDROGEN BONDS IN DYEING PROCESSES. D. S. E. Campbell, D. Cathcart, and C. H. Giles. J. Soc. Dyers Colourists 73: 546-553 (Dec. 1957). (884)

The results of a refractometric study of the formation of intermolecular hydrogen-bond complexes in water between aromatic compounds, including sulfonated dyes, and a variety of other reagents, including casein, used as models of fibers, are interpreted as an indication of the nature of possible hydrogen-bond complexes between dyes and fibers. Some conclusions are: (1) nonionic polar groups in dyes and other aromatic compounds, whether sulfonated or not, can form intermolecular hydrogen-bond complexes in water with a variety of organic compounds, (2) hydrogen-bond formation between dyes and fibers in presence of water appears to be possible with protein fibers, nylon, cellulose acetates, Terylene, and acrylonitrile fibers, but is less likely to occur with cellulosic fibers. Suggestions are made regarding the nature and the position of the dye-fiber bonds. Graphs. Tables. 36 references.

INFRARED PROPERTIES OF DYESTUFFS. E. Ganz (Ciba Ltd). Dyer 119: 167-172 (Jan. 31, 1958). (885)

The effectiveness of camouflage both in the infrared and the visible spectral regions depends on adaptation of the spectral properties of the camouflage to those of the natural surroundings. Spectral regions of sensitivity to various infrared detecting methods, the suitability of dyestuffs and finishes for camouflage purposes, testing methods, and standards are discussed. Photographs. Graphs. Diagrams.

DYEING OF ACRILAN WITH PREMETALIZED NONSULFONATED DYES IN THE PRESENCE OF AGENTS CONTAINING ORGANIC SOLVENTS. P. Cordillot. Teintex 22, No. 6: 435-441 (1957). In French. Through BCIRA 37: 515 (1957). (886)

The procedure described consists in the application of nonsulfonated, metal-complex dyes of the Lanasyn type in the presence of an anionic agent emulsifying the organic solvent (e.g. Dilatine DB, a product successfully used as carrier in dyeing polyvinyl and polyester fibers). Perfect penetration of the dye can be obtained in this way and the neutralization with bicarbonate, to restore the handle of the fabric and to obtain fastness to light, is unnecessary. The shades obtained are as bright as those given by the classical dyeing procedures on Acrilan and even on wool.

BLEEDING OF VAT DYES IN POLYVINYL CHLORIDE RESIN. Dyes & Chem. Tech. Bull. 13: 178-180 (Dec. 1957). (887)

Vat dyes are widely used for dyeing canvas for shoes because of their outstanding fastness properties. Manufacturers of canvas shoes use a polyvinyl chloride resin in vulcanizing the upper portion of the shoe to the sole and in many cases obtain substantial bleeding of the dyes into the resin. Ratings for bleeding of du Pont vat dyes into the resin are given. These were obtained by means of a test simulating the vulcanizing step.

DU PONT TECHNICAL BULLETIN INDEXES BY INDUSTRY. Dyes & Chem. Tech. Bull. 13: 196-209 (Dec. 1957). (888)

A number of articles have been published in the Technical Bulletin since 1945 pertaining to the use of dyes and chemicals in a specific industry. The articles are listed under the following categories: fibers, leather, paper, and printing.

ARTIFICIAL AND SYNTHETIC DYES. G. Capron. Rev. Textilis 13, No. 5: 20-24; No. 6: 17-24 (1957). In French. Through BCIRA 37: 514 (1957). (889)

The development of the synthetic dyes industry is reviewed, excerpts are given from relevant publications, reference is made to the patent literature, and figures are quoted for the production of dyes in various countries, covering the period 1914-1949.

POSSIBILITIES AND LIMITATIONS OF THE APPLICATION OF PIGMENTS TO TEXTILES. W. Kass (Farbenfabriken Bayer AG). J. Soc. Dyers Colourists 74: 14-21 (Jan. 1958). (890)

The fixation of pigments on various types of fibers by means of synthetic resins is discussed, and the advantages and disadvantages of this type of process are considered.

DYE PROBLEMS IN PRINTING. W. Christ. Teintex 22, No. 6: 456-465 (1957). In French. Through BCIRA 37: 516 (1957). (891)

Problems encountered in printing with vat dyes, sulfuric esters of leuco derivatives of vat dyes, dyes on Naphthol AS basis, phthalocyanines, and pigments are reviewed, with reference to printing of synthetic fibers (polyamide, polyacrylonitrile, and polyester fibers).

APPLICATION OF DIRECT DYES TO COTTON AND RAYON BY PAD-STEAM AND PAD-ROLL TECHNIQUES. Dyes & Chem. Tech. Bull. 13: 191-195 (Dec. 1957). (892)

Continuous dyeing by padding, followed by drying, has been practiced for many years in the production of light shades. This continuous application, padding without subsequent development, does not provide maximum fixation because direct dyes require more time and/or temperature for fixation than is available in this process. The du Pont pad-steam continuous dyeing process and the Svetema pad-roll dyeing machine (AB Svenska Textilmaskinfabriken) both offer conditions that are suitable for the fixation of a number of direct dyes on rayon and cotton by a continuous or semi-continuous method. Both processes are described and tabulation of the results of the two application methods, compared with the control, is given.

DYEING OF KNITTED FABRICS WITH INDANTHRENE DYES. K. Rooseboom. Z. ges. Textil-Ind. 59, No. 13: 507-510 (1957). In German. Through BCIRA 37: 515 (1957). (893)

Directions are given for the preparation and dyeing of knitted fabrics (underwear) with Indanthrene dyes by the stock-vat dyeing method; dyeing at stagewise increased temperature using indirect steam; pigment-dyeing on the winchbeck; pigment-padding and subsequent winchbeck development; continuous treatment.

RELATION BETWEEN THE ABSORPTION SPECTRA AND THE CHEMICAL CONSTITUTION OF DYES. PART 29. INTERACTION OF DIRECT AZO DYES IN AQUEOUS SOLUTION. M. N. Inscoe, J. H. Gould, M. E. Corning, and W. R. Brode. J. Research Nat. Bur. Standards 60: 65-83 (Jan. 1958). (894)

Interaction of dyes in aqueous solution results in differences in the spectrum of the mixture when compared with the sum of the spectra of the individual dyes. A general survey, chiefly with azo dyes, was made to determine the effect of dye structure on this interaction. The effect of other factors on the interaction of direct azo dyes was investigated. The addition of alcohol or nonionic detergent prevents this interaction, while the presence of inorganic salts or an increase in dye concentration appears to increase the extent of interaction. The effect of acids and bases is dependent upon the nature of the dyes in the mixture. The results obtained are consistent with the assumption that the forces involved in the interaction of direct azo dyes in mixtures are the same as those causing the aggregation of individual dyes and those binding these dyes to fibers. 28 references.

ECONOMIC SMALL-SCALE PROCESSING SYSTEM FOR LIGHTWEIGHT TUFTED GOODS. Cherry Tree Mach. Co. Ltd. Man-Made Textiles 34: 69 (Feb. 1958). (895)

The Cherry Tree model 2436 rotary sample dyeing machine is designed for the production of special colors in small batches and to establish quality control procedures for the subsequent large-scale production of pale to medium pastel shades on candlewick bedspreads. Its operation is described.

MODERN MACHINES FOR ROLLER PRINTING. A. Franken. Tex 16, No. 6: 762-763 (1957). In Dutch. Through BCIRA 37: 516 (1957). (896)

LEVELING PROBLEMS IN VAT DYEING. H. Musshoff (Cassella Farbwerke Mainkur AG). J. Soc. Dyers Colourists 73: 543-546 (Dec. 1957). (897)

An important factor in the poor leveling of certain vat dyes is slow migration due to molecular aggregation (up to 3,000 molecules) of the leuco compound in solution. Migration may be improved by addition to the dyebath of a suitable nonionic solvent, e.g. Solidegal GL (CFM). Practical methods for overcoming leveling difficulties in package dyeing and piece dyeing, notably the vat-acid and pad-steam processes, are discussed. Table. 2 references.

MORE EFFICIENT PACKAGE DYEING. Firma B. Thies. Textile Weekly 58(1): 399-400 (Feb. 7, 1958). Textile Merc. 138: 211, 213 (Feb. 7, 1958). (898)

The trend towards increased diameters of package, both in beams and cone and cheese, together with increased winding densities, has made it necessary to design dyeing apparatus that can cope with this development. The features of the Thies turbo-dyeing apparatus, employing a special turbine pump to overcome the resistance of the bigger and tighter packages, are described. Photograph.

LIGHTFASTNESS OF SELECTED DIRECT COLORS ON COTTON, RAYON, AND COTTON-RAYON BLENDS. AATCC Delaware Valley Sect. Am. Dyestuff Reptr. 47: P115-P117 (Feb. 24, 1958). (899)

Studies were made of 100% cotton fabrics using various commercial methods of preparation. The rayon blends and 100% rayon fabric were prepared using commercial methods suitable for that fabric. Dyeings were made using selected fast-to-light direct colors, such as considered satisfactory for automotive and upholstery fabric, using methods recommended by the dyestuff manufacturers. Laboratory data are presented which show that, in accordance with general assumption, the light-fastness of cotton-rayon blends does improve directly with the percentage of rayon. Graphs. Tables.

WHY AND HOW OF TEXTILE PRINTING. R. W. Jacoby. Textile Inds. 122: 110-115 (Feb. 1958). (900)

After a review of methods of printing and types of colorants, factors affecting the cost of operation are discussed under the following headings: condition of the cloth as it comes to the printing machine; depth of engraving; gauge of doctor; angle at which doctor is applied to the print roller; weights used on doctor; print machine hour cost; production per print machine hour; and print paste formula. Table. Photographs.

TESTING AND MEASUREMENT E

IMPORTANCE OF MATERIAL TESTING AND STANDARDIZATION OF TEXTILE TESTING METHODS. C. Bräutigam. Melliand Textilber. 38, No. 5: 580-582; No. 6: 696-702 (1957). In German. Through BCIRA 37: 497 (1957). (901)

DIN specifications concerning testing methods for textile fibers, yarns, and fabrics are reviewed and reference is made to other suggestions submitted to the German Standards Committee and the present state of work on the standardization of testing methods.

ELECTRONIC TENSILE STRENGTH TESTING MACHINE Z600. Melliand Textilber. 38, No. 5: 507-510 (1957). In German. Through BCIRA 37: 497 (1957). (902)

The limitations of mechanical tensile strength testers are discussed and the electronic machine Z600 is described as an example of the wider applicability of electronic devices in measuring very small forces with low inertia. The machine, designed for testing fibers, yarns, cords, foils, thin wires, etc., is equipped for a measuring range of 1-20,000 g, and has an accuracy of 1%. Some diagrams recorded by the machine are reproduced and explained.

GREIGE MILL CONTROL THROUGH FLUORESCENCE. Fibre and Fabric 110: 8, 34 (Dec. 1957). (903)

The use of fugitive fluorescent tints for identification of woolen blends and lots of yarn is described.

ASTM STANDARDS ON TEXTILE MATERIALS (WITH RELATED INFORMATION), 1957. Am. Soc. for Testing Materials, 1916 Race Street, Philadelphia 3, Pa. Nov. 1957. 846 p. $7.25. (904)

See abstr. 509 (1957).

FIBERS E 1

CRITICAL ANALYSIS OF INTERLABORATORY TESTS CARRIED OUT ON DIFFERENT COTTON VARIETIES. D. De Meulemeester, G. Raes, and T. Fransen. Ann. Sci. Textiles Belges No. 1: 53-95 (1957). In French. Through BCIRA 37: 497 (1957). (905)

Interlaboratory tests (9 laboratories), carried out on 12 cottons from different sources by means of the Arealometer, are compared. The differences in the results (presented in tables) are attributed either to differences in the calibration of the Arealometer capillaries or to a difference in the preparation of the fiber plug. To reduce these differences, directions are given in the addendum for the determination of the specific surface by means of the Arealometer, standardization of the apparatus, weighing of the specimens, preparation of the fiber plug, and manner of carrying out the tests and recording the results.

DISSOLUTION PHENOMENA OF NYLON AND PERLON IN HYDROCHLORIC ACID. F. Malz. Z. ges. Textil-Ind. 59, No. 12: 471-473 (1957). In German. Through BCIRA 37: 498 (1957). (906)

The method, described for studying nylon and Perlon, can be carried out, after removing from the monofilament any adhering preparations by extraction with petroleum ether, either visually or under the microscope. The dissolution forms of nylon and Perlon differ in low acid concentrations; the differences disappear at higher concentrations. The observations show that, in contrast to nylon which shows definitely a core- and skin-effect, Perlon develops a skin only during the stretching process.

EXAMINATION OF CELLULOSE FIBER BY THE LOW TEMPERATURE SPECIMEN METHOD OF ELECTRON DIFFRACTION AND ELECTRON MICROSCOPY. G. Honjo (Tokyo Inst. of Technol.) and M. Watanabe (Japan Electron Optics Lab.). Nature 181: 326-328 (Feb. 1, 1958). (907)

SEPARATION OF ARDIL FIBERS FROM REGENERATED CELLULOSE FIBERS (VISCOSE AND CUPRAMMONIUM AND FROM WOOL. PART 3. E. Frieser. Melliand Textilber. 38, No. 5: 566-569 (1957). In German. Through BCIRA 37: 498 (1957). (908)

Methods for the quantitative separation of Ardil (groundnut protein) fibers from regenerated cellulose fibers and wool, respectively, are examined and it is concluded that only the modified formic acid/zinc chloride method is suitable for the analysis of Ardil/cellulose blends, while four different methods (modified sodium-hydroxide method, barium-hydroxide method, trypsine method according to Kirret, and sulfuric acid method) can be used for the separation of Ardil/wool blends with equal accuracy. For parts 1 and 2 see abstr. 1327 and 1692 (1957).

YARNS E 2

AUTOMATIC TORSIOMETER. J. Henno and R. Jouhet. Bull. Inst. Textile France No. 66: 97-101 (Apr. 1957). In French. Through BCIRA 37: 523 (1957). (909)

The torsiometer described and illustrated (developed by the laboratories of the CRSIT) makes it possible to measure automatically the twist on short lengths (5 cm) of yarn. The results (number of turns in S and Z direction) are recorded in a diagram. The mean values of the twist coefficient per meter are, in general, slightly higher than those obtained on the usual torsiometer for samples of 50 cm length.

DETERMINATION OF STANDARD DEVIATION AND OF THE VARIATION COEFFICIENT BY NOMOGRAMS. U. Liebscher. Deut. Textiltech. 7, No. 4: 235-237 (1957). In German. Through BCIRA 37: 499 (1957). (910)

Simple nomograms are shown for determining the standard deviation and coefficient of variation of test results for the tensile strength of cotton yarn (metric count 50) and an example is given to explain the use of these nomograms.

EVALUATION OF ERRORS IN THE B-L CURVE BY THE "INERT TEST" METHOD. J. Grignet. Ann. Sci. Textiles Belges No. 1: 96-113 (1957). In French. Through BCIRA 37: 499 (1957). (911)

The theories underlying the "inert test" method of Grosberg and Palmer, corrected by Grignet and Monfort, are examined with respect to the accuracy of the results obtained by this method. It is shown that, in the case of an ideal yarn with fibers of equal length, the maximum deviation between the theoretical B-L curve and that obtained by the "inert test" (Zellweger integrator) is about 1.5% at a velocity V=2 m/min, and 0.1% at V=4 m/min. In the case of yarn with normal fiber length distribution (trapezoidal), the B-L curve gives a negligible error of 0.1-1.5% and 3-5% at a velocity of 4 and 2 m/min, respectively.

YARN TENSION AND ITS PROBLEMS. PART 4. J. R. Wright (Uster Corp.). Textile Bull. 84: 73-75 (Feb. 1958). (912)

Procedures recommended for setting up and measuring tension on warpers and slashers with the Uster Recordograph are given. Factors influencing warp tension on the loom are listed. Graphs.

ELECTRONIC THREAD TENSION GAUGE. Dawe Instr. Ltd. Fibres 19: 23-24, 31 (Jan. 1958). (913)

The inadequacy of many conventional thread-tension indicators lies in the fact that they convert tension fluctuations into pointer deflections by means of simple mechanical linkages. In relation to the quantity it measures, a mechanical linkage, owing to its inertia, is quite incapable of recording peak values or transients. It also has the disadvantage that it diverts the thread from its usual course and thus imposes additional stresses on it. The Dawe 636 thread tension gauge described overcomes the deficiencies of mechanical tension indicators. Features of the device and typical applications are described. Diagrams. Photographs.

ROVING TESTS. V. Saxl. Textile World 108: 107 (Feb. 1958). (914)

At the Fitchburg Yarn Co., a special roving tester is used to supplement the work of the Uster evenness tester. The new instrument, a Resistiro-Rex tester, checks on the uniformity of twist, tension, and draft, while the Uster tester determines linear evenness. There is no direct relation between the findings of the two instruments, but they complement each other. The test method and criteria for good roving are briefly described. Graphs.

IRREGULARITY STANDARDS IN COTTON SPINNING. Textile Recorder 75: 64-65 (Feb. 1958). (915)

The latest information on uniformity standards for sliver, roving, and yarn, as well as recommendations on the frequency of testing are given. These are based on a brochure published by Zellweger AG. See TTD abstr. 2862 (1957). Tables. Graphs.

FABRICS E 3

APPARATUS FOR MEASURING THE RESISTANCE OF FABRICS TO RAIN BY DYNAMIC TESTING. J. Kiger and J. Rannou. Industrie Textile: 375-379 (May 1957). In French. Through BCIRA 37: 500 (1957). (916)

The modified "Schmerber hydrofugimeter" is described. The small number of tests carried out on this tester up to now does not permit definite conclusions to be drawn with regard to its efficiency, but the results obtained show good reproducibility under circumstances which approach very closely real weather conditions.

STANDARD TESTS FOR FLAMMABLE AND FLAME-PROOF TEXTILES. F. Ward (Courtaulds Ltd). Textile Recorder 75: 74-77 (Feb. 1958). (917)

British and American standard tests for flammable and effectively flameproofed fabrics are critically evaluated. Photographs. Diagram. 6 references.

STANDARD METHODS FOR THE ASSESSMENT OF THE COLORFASTNESS OF TEXTILES: THIRD REPORT OF THE FASTNESS TESTS CO-ORDINATING COMMITTEE. Suppl. 1. J. Soc. Dyers Colourists 74: 22-37 (Jan. 1958). (918)

Changes and additions are reported. See TTD 12: 415 (1955) for the original report.

OTHER E 4

THERMOTEST APPARATUS FOR DETERMINING THE SUBLIMATION FASTNESS OF DYEINGS. Soc. Diffusion des Appareils de Mesure et de Controle. Teintex 22, No. 5: 343-347 (1957). In French. Through BCIRA 37: 525 (1957). (919)

The apparatus described makes it possible to determine accurately, within 30 sec, the thermal behavior of polyester fabrics dyed with plastosoluble dyes, i.e.: the exact temperature at which sublimation of the dyes begins and at which it attains a certain value, and the degree of sublimation at a given temperature. Browning temperature, behavior of finishing products (especially optical bleaching agents) to various temperatures, and the effects of thermal and chemical treatments or finishes on the waxing and sizing temperatures, fastness properties of the dyeings, etc., can also be determined by means of the Thermotest apparatus.

LIGHT FACTORS TO BE CONSIDERED IN TEXTILE COLOR MATCHING. W. B. Reese. Am. Dyestuff Reptr. 47: P49-P56 (Jan. 27, 1958). (920)

In this discussion of the relationship and importance of the light source as an aid to the colorist in his color matching work it is pointed out that: (1) the only light source acceptable to the colorist is a duplication of preferred daylight conditions; (2) two illuminants are required for color matching for the detection of metameric color matches and the two best illuminants are north sky daylight and horizon sunlight; (3) artificial daylight must accurately duplicate natural daylight and should be used at an intensity of between 75 and 300 foot-candles; and (4) the surrounding conditions should be neutral to avoid color distortion due to color confusion. Diagrams. Photographs. 9 references.

DETERMINATION OF THE DISTRIBUTION OF THERMOSETTING RESINS IN FABRICS FROM REGENERATED CELLULOSE AND COTTON BY MEANS OF RADIOACTIVE ISOTOPES. H. Enders. Melliand Textilber. 38, No. 5: 547-555 (1957). In German. Through BCIRA 37: 501 (1957). (921)

Methods for detecting the resin deposition on fabrics are reviewed and the autoradiographic method is described, by means of which it is possible to observe the distribution of C^{14}-labelled resin-condensates in regenerated cellulose and cotton fabrics. Fabric and fiber cross-sections are prepared and contacted with a thin film emulsion, the film strips developed after sufficiently long exposure to light, and photomicrographs taken from them. The advantages of the method are limited by the high price of the radioactive labelled precondensates and the necessary precautionary measures.

INDUSTRIAL ENGINEERING F

THE TRIM PROBLEM. K. Eisemann (Intern. Business Machines Corp.). Management Science 3: 279-284 (Apr. 1957). (922)

A typical problem for the minimization of trim losses in cutting rolls of paper, textiles, cellophane, metallic foil, or other material is solved by means of linear programming.

SOME STATISTICAL CONSIDERATIONS IN WORK SAMPLING. R. W. Conway. J. Ind. Eng. 8: 107-111 (Mar./Apr. 1957). (923)

Mathematical models for stratified sampling and for nonindependence of observations are developed.

TRAINING FOR RESPONSIBILITY IN A TEXTILE MILL. R. D. Archibald (Dominion Textile Co. Ltd). Can. Textile J. 75: 49-53 (Feb. 7, 1958). (924)

The responsibilities of and qualities essential for a textile mill supervisor are enumerated, and feasible training programs are discussed.

MILL PURCHASING PRACTICES: 1958. Textile Inds. 122: 87-106 (Feb. 1958). (925)

Buying is a science, by R. Brassica, p. 87-88; Buying capital equipment, by E. Stowell, p. 89-91; Buying repair parts, p. 92-93; Buying general mill supplies, p. 94-95; Buying dyes and chemicals, p. 96-101; Try yarns before buying, by C. G. Cook, p. 102-103; How many cones shall we test, by O. P. Beckwith, p. 104-106. Reprints of this special section on mill purchasing practices are available free from Textile Industries, 806 Peachtree Street, N. E., Atlanta 8, Ga.

PUNCHED CARD METHOD IN THE TEXTILE INDUSTRY. W. T. Schumann. Melliand Textilber. 38, No. 5: 576-580 (1957). In German. Through BCIRA 37: 504 (1957). (926)

The use of the punched card system for calculating wages and piece work rates and for weaving accounts is discussed.

SCIENCES G

CHEMISTRY G 1

PENETRATION AND SUPERCONTRACTION OF KERATIN FIBERS BY LITHIUM BROMIDE SOLUTIONS. A. R. Haly and J. Griffith (Wool Textile Research Labs., CSIRO, Australia). Textile Research J. 28: 32-40 (Jan. 1958). (927)

With the aid of a microscope, measurements were made of the diametral swelling and degree of supercontraction of wool fibers in lithium bromide solutions at room temperature. Considerable differences were found between supercontractions measured around the orthocortical and around the paracortical sides of the fibers. The mode of penetration of the solutions into the fibers was studied, and it was concluded that the epicuticle is an important barrier to the entry of the reagent. In addition, rates of supercontraction of wool, kid mohair, and human hair fibers in lithium bromide solutions at 89° and 100° C were determined. Supercontraction-time curves exhibit three well-defined zones; an attempt is made to explain these characteristics. Some histological observations are reported. Photomicrographs. Graphs. Tables. 16 references.

SURFACTANTS LISTED: SYNTHETIC DETERGENTS AND EMULSIFIERS UP TO DATE. 4th revision. PART 3. J. W. McCutcheon. Soap Chem. Specialties 34: 52-70 (Feb. 1958). (928)

ACTION OF SELENIUM DIOXIDE ON WOOL. J. R. Holker and J. B. Speakman (Leeds Univ.). J. Appl. Chem. 8: 1-3 (Jan. 1958). (929)

Selenium-containing cross-linkages are formed when wool which has been reduced with thioglycollic acid is treated with a solution of selenium dioxide. Each selenium atom links two cysteine side-chains, and it is suggested that tetracysteinyl-selenium cross-linkages are not obtained because the cystine cross-linkages of intact wool are too far apart.

RAPID GRAPHICAL COMPUTATION OF SMALL COLOR DIFFERENCES. F. T. Simon and W. J. Goodwin (Union Carbide Corp.). Am. Dyestuff Reptr. 47: 105-112 (Feb. 24, 1958). (930)

Based on the CIE system, the method outlined permits the evaluation of quantitative data that have visual meaning with respect to the color solid. Time-consuming color difference calculations can now be replaced with a rapid and valid graphical computation. Graphs. 8 references.

CHEMICALLY MODIFYING CELLULOSE FOR FLAME RESISTANCE. R. F. Schwenker, Jr., and E. Pacsu (Textile Research Inst.). Ind. Eng. Chem. 50: 91-96 (Jan. 1958). (931)

Cotton and viscose rayon fabrics have been chemically modified to yield new cellulose derivatives characterized by good flame and glow resistance. The textile properties of the original materials have been essentially unimpaired. Studies on pyrolytic degradation of cellulose and its derivatives have furnished data to support a mechanistic theory for decomposition of cellulose at elevated temperatures. Chemical modifications carried out on a variety of cellulosic materials have decreased flammable products by changing the path of thermal decomposition. These modifications have also permitted specific flame and glow retardants to be introduced into cellulose, which effectively suppress flaming and afterglow. Tables. Photographs. 17 references.

RELATIONSHIP OF EXPERIMENTALLY EVALUATED LATERAL ORDER DISTRIBUTION TO THE SKIN-CORE EFFECT OF VISCOSE RAYON. Y. Tsuda and S. Mukoyama (Toyo Rayon Co. Ltd). Textile Research J. 27: 945-949 (Dec. 1957). (932)

The lateral order distributions of experimental rayons spun in spinning baths of various compositions are evaluated using the method of fractional dissolution of the methanolized cellulose. They are compared with the skin-core effect of cross section which is characteristic of the structure of viscose rayon. Photomicrographs. Graphs. Table. 6 references.

PROBLEM OF STATIC IN HANDLING YARNS AND FABRICS. PART 2. REVIEW OF ANTISTATIC AGENTS. Textile Merc. 138: 101-102 (Jan. 17, 1958). (933)

The use of polyalkylene oxide waxes (BP 779 491), triethanolamine salts of benzene monocarboxylic acids (BP 754 054), condensation product of fatty alcohols with ethylene oxide (BP 770 415), condensation product of sulfamide with ethylene oxide (BP 763 215), and the reaction product of phosphoric acid esters of aliphatic or aromatic hydroxyl compounds with ethylene oxide (BP 769 039) are described. Deterioration in storage and washfastness problems of antistatic agents are briefly mentioned.

PATENT CHECKLIST

U.S. patents may be obtained from the U.S. Patent Office, Washington, 25, D.C., for 25¢ a copy. Photostatic copies of foreign patents are also available. Charges for these photostats are based on the number of pages in the patent.

FIBERS A

MANMADE FIBERS A 2

IMPROVING DYEABILITY OF POLYVINYL ALCOHOL FIBERS. Kurashiki Rayon KK. BP 757 719, Sept. 26, 1956. Through BCIRA 37: 475 (1957). (934)

Polyvinyl alcohol fibers that have been heated (e.g. in steam at 160° C) to make them resistant to hot water are aminoacetalized to inerease their affinity for dyes.

MANUFACTURE OF ARTIFICIAL FILAMENTS AND FILMS OF IMPROVED MECHANICAL PROPERTIES. Deutsche Gold & Silber Scheideanstalt. BP 759 374, Oct. 17, 1956. Through BCIRA 37: 535 (1957). (935)

The invention relates to the incorporation of certain oxides of Si, Al, Zr, Ti, Zn, or Sn in filaments or films, not as dulling agents, but in order to enhance the mechanical properties, e.g. resistance to rubbing. The special feature is that the oxides are in the very fine state of division characteristic of aerosols.

ENHANCING THE ACETATE DYEABILITY OF VINYLIDENE CYANIDE INTERPOLYMERS. G. Gateff and S. M. Davis (to B. F. Goodrich Co.). USP 2 819 253, Jan. 7, 1958. (936)

Vinylidene cyanide interpolymers of improved dyeability are obtained by hydrolyzing the interpolymers under acidic conditions prior to fiber formation.

TUBE SPINNING. E. J. Griset, Jr. (to Am. Enka Corp.). USP 2 820 279, Jan. 21, 1958. (937)

Arrangement for permitting warp handling of tube spun aftertreated yarns while avoiding the transmission of undesirable tension into the tubes where the yarns are liquid treated.

DISCOLORATION-RESISTANT VISCOSE RAYON FIBERS. R. D. McNeer and A. W. Hunter (to Am. Viscose Corp.). USP 2 821 489, Jan. 28, 1958. (938)

The viscose rayon fibers are washed to remove soluble impurities, saturated with a solution of a monovalent alkali metal bisulfite, sulfurous acid, or sulfur dioxide at a pH of 3 to 6, squeezing to remove the solution, and drying.

ROUGHENING AND MATTING TERYLENE FILAMENTS. Vereinigte Glanzstoff Fabriken AG. BP 756 715, Sept. 5, 1956. Through BCIRA 37: 475 (1957). (939)

Terylene filaments derived from a polycondensation in a solvent of high bp and still containing 7-12% of solvent are passed, while still hot, through air for a short distance and then through a cold organic solvent that extracts the original solvent (e.g. carbon tetrachloride), after which they are stretched and exposed to superheated steam. The originally smooth filaments become matt and rough and the undesirable "pilling" effect is overcome.

PRODUCING UNIFORM POLYACRYLONITRILE FIBERS. E. F. Evans (to E.I. du Pont de Nemours & Co.). USP 2 821 458, Jan. 28, 1958. (940)

Polyacrylonitrile fibers characterized by uniformity of structure, luster, and dyeability are produced by heating a spun polymer, containing at least 5% by weight of an inert solvent, while it is in a relaxed condition in an inert nonaqueous medium, removing all but 2.5% of the solvent, and drawing the polymer.

PROTEIN-POLYACRYLONITRILE FIBER-FORMING POLYMERS. H. J. Hagemeyer, Jr. and E. L. Oglesby (to Eastman Kodak Co.). USP 2 822 339, Feb. 4, 1958. (941)

Polymeric compositions capable of forming readily dyeable fibers with high softening points, high tensile strength, and good elongation are prepared by the polymerization of acrylonitrile and a detergent-unfolded protein, with or without isopropenyl acetate.

YARN PRODUCTION B

CRIMPED ARTIFICIAL FILAMENTS. N. B. Rajchenbaum (to Imp. Chem. Inds. Ltd). BP 759 070, Oct. 10, 1956. Through BCIRA 37: 535 (1957). (942)

Drawn filaments of the nylon and Terylene types are crimped (e.g. by the stuffer-box or gear-wheel devices), the crimp is set (e.g. by dry or steam heat), and the crimped filaments are subjected to one or more further crimping processes while under tension that is insufficient to straighten the initial crimp. The filaments may be rotated so that the additional crimps occur in different planes. The process may be applied to a tow and the product spread into a ribbon, lubricated, and cut to staple fiber.

FALSE-TWISTING DEVICES FOR CRIMPING FILAMENTS. Heberlein & Co. AG. BP 759 816, Oct. 24, 1956. Through BCIRA 37: 543 (1957). (943)

A false-twisting device for use in crimping manmade fibers is driven by an air turbine at speeds of 50,000 to 200,000 rev/min. One of three sectional drawings shows two air jets impinging on the turbine vanes at diametrically opposite positions.

SUBJECTING TOW OF CONTINUOUS FILAMENTS TO BREAKING AND DRAFTING IN TWO ZONES TO FORM SPUN YARN. T. Takagi. BP 759 939, Oct. 24, 1956. Through BCIRA 37: 541 (1957). (944)

Apparatus for breaking filaments in a tow into staple fiber and drafting the product for spinning into a yarn on a ring frame or centrifugal pot machine.

MAGNETIC METAL DETECTOR FOR TEXTILE WASTE-OPENING AND OTHER PROCESSING MACHINES. A. Earnshaw. BP 760 066, Oct. 31, 1956. Through BCIRA 37: 540 (1957). (945)

Means for detecting pieces of iron in textile waste, etc., being fed to a processing machine. A nonmagnetic bar extends across the path and a series of horseshoe magnets is hung from it with adjacent poles alternately N, S, N, S, etc.

DEVICE FOR CRIMPING NYLON YARN BY INSERTING FALSE TWIST WHILE IT IS SEMIPLASTIC. E. Findlow (to Ernest Scragg & Sons Ltd). BP 760 261, Oct. 31, 1956. Through BCIRA 37: 543 (1957). (946)

CHEMICAL AIDS FOR REGENERATED CELLULOSE STAPLE FIBER. Spinnfaser AG. BP 760 766, Nov. 7, 1956. Through BCIRA 37: 540 (1957). (947)

To ensure smooth drafting in spinning, staple fiber is treated with an emulsion of one or more alcohols of the series C_{22} to C_{34}, preferably C_{29}-C_{31}, which may be mixed with their esters of C_{15}-C_{34} fatty acids. A typical mixture is cotton wax. A series of drafting diagrams (force/attenuation) contrasts the jerky drafting of staple fiber dressed with conventional softeners with the smooth drafting achieved by the new treatment.

PRODUCING CRIMPED YARNS. F. Scragg (to S. & E. Scragg Ltd). BP 760 848, Nov. 7, 1956. Through BCIRA 37: 543 (1957). (948)

Synthetic yarn is drawn from a supply package through the inside of a tubular spindle and out through a lateral passage in a heated head on the spindle or a heated member carried by the head, and is then rewound into a package by a takeup mechanism. The heated head or member rotates in a magnetic field and the induced eddy currents provide the source of heat.

PREPARATION OF COTTON WASTE FOR SPINNING. A. Linnert and G. Short (to Brit. Cotton Ind. Research Assoc.). BP 778 417, Mar. 10, 1957. Through BCIRA 37: 509 (1957). (949)

Method and machine for breaking-up hard waste, in which the opened part is separated and passed over for further processing, are described. The number of stages of treatment can be reduced and the end product is substantially free from process nep.

PROCESS FOR CRIMPING SYNTHETIC FIBERS. E. W. Le Boeuf (to Dow Chem. Co.). USP 2 818 630, Jan. 7, 1958. (950)

Randomly crimped vinylidene chloride copolymer fibers are prepared by passing a continuous tow of the fibers between the nip of a pair of rolls operating at different peripheral speeds.

APPARATUS FOR CONVERTING FILAMENT INTO SLIVER. W. W. Ingenthron, Jr. (to Pacific Mills). USP 2 820 254, Jan. 21, 1958. (951)

CRIMPING MECHANISM. G. Mariani, L. Notarbartolo, and W. Münch (to Perfogit SpA). USP 2 820 278, Jan. 21, 1958. (952)

Device for the continuous crimping of filaments, tows, or slivers of synthetic fibers.

YARN HEATING APPARATUS. P. van Dijk (to Am. Enka Corp.). USP 2 820 876, Jan. 21, 1958. (953)

Heat treated yarns of high quality and uniformity are produced by guiding the yarns in a helical path around a smooth heating surface at an angle of inclination of at least 70° and preferably 85° to 89°.

APPARATUS FOR PRODUCING VARIABLE DENIER MULTIFILAMENT YARN. J. S. Seney (to E.I. du Pont de Nemours & Co.). USP 2 820 986, Jan. 28, 1958. (954)

CONTROLLING THE CRIMPING ARC IN COMPRESSION CRIMPING. H. Wegener (to Inventa AG). USP 2 820 988, Jan. 28, 1958. (955)

Automatic control of crimping arc by maintaining a definite ratio between the feeding of the uncrimped strand and the withdrawal of the crimped strand.

FIBER CUTTER. R. D. Heffelfinger and R. MacHenry (to Am. Viscōse Corp.). USP 2 821 253, Jan. 28, 1958. (956)

Apparatus for producing staple fiber or flock of accurate length from bundles of filaments under either dry or wet conditions.

OPENING, PICKING, FIBER PREPARATION B 1

LAP FORMATION ON PICKERS. Hermann Trützschler, Hans Trützschler, and C. Mullges (to Trützschler & Co.). BP 758 870, Oct. 10, 1956. Through BCIRA 37: 540 (1957). (957)

The lap is allowed to grow to a predetermined size in lateral guides when it is automatically raised by means of projections on the heads of the lap racks until the web hangs free. A new lap rod or tube is then pushed in so that it presses the web into the trough formed by the two lap rollers and the hanging web is tensioned. Simultaneously a knife comes from behind, severs the web above the new lap rod or tube, and throws the oncoming cut edge of lap over the rod or tube. The finished lap travels on a suitable runway to a collecting table.

PNEUMATIC DELIVERY OF FIBERS. W. A. Hunter and A. Birtwistle (to T. M. M. (Research) Ltd). BP 756 233, Sept. 5, 1956. Through BCIRA 37: 478 (1957). (958)

When air-borne fibers pass from a flared trunk to a collecting surface, they tend to settle in a concentrated mass opposite the longitudinal axis of the trunk. To secure even deposition it is proposed to mount a deflector in the trunk so as to divert the air stream towards the flared walls.

HOPPER FEEDER FOR EQUALIZING THE QUANTITIES OF FIBERS ISSUING FROM AN OPENER. A. G. Texthold (Germany). BP 756 418, Sept. 5, 1956. Through BCIRA 37: 477 (1957). (959)

DUST COLLECTING MEANS FOR TEXTILE MACHINERY. V. E. Hood (to Fan Systems Ltd). BP 757 627, Sept. 19, 1956. Through BCIRA 37: 478 (1957). (960)

The invention concerns the extraction of dust and fly, particularly from the opening, picking, spreading, and related machines used with flax, jute, and wool. The usual rather cumbersome hoods are replaced by folding, collapsible or rollers shutters, or removable panels, and the enclosure communicates with dust extraction trunks.

APPARATUS FOR OPENING A WET STAPLE FIBER FLEECE. Spinnfaser AG. BP 758 324, Oct. 3, 1956. Through BCIRA 37: 540 (1957). (961)

The wet fleece emerging from a mangle is passed over a spiked roller traveling at the same or slightly greater surface speed and made to bend considerably (e.g. by going about half way round the roller); compressed air is directed at the fleece secantially, from nozzles, as it passes around the spiked roller.

APPARATUS FOR OPENING FIBROUS MATERIALS. F. Singleton (to T. M. M. (Research) Ltd). BP 778 731, July 10, 1957. Through BCIRA 37: 509 (1957). (962)

The textile material is spread on a conveyor and delivered as a fleece to a cooperating pair of feed elements that forward it at a controlled rate to a dual (spiked) conveyor system; this is driven so that adjacent courses travel in the same direction at different speeds, a combing and opening action being performed on the material.

CARDING AND COMBING B 2

SLIVER PROCESSING. B. E. King and L. Whitcombe (to T. M. M. (Research) Ltd). BP 779 197, July 17, 1957. Through BCIRA 37: 509 (1957). (963)

Sliver irregularities are recorded and smoothed out by an electrical control system.

SLIVER CAN PACKING MECHANISMS FOR TEXTILE MACHINES. C. Atkinson (to Fairbairn Lawson Combe Barbour Ltd). BP 780 041, July 31, 1957. Through BCIRA 37: 509 (1957). (964)

The mechanisms have no levers.

MECHANISMS FOR WINDING SLUBBING. H. Hopkinson. BP 756 051, Aug. 29, 1956. Through BCIRA 37: 478 (1957). (965)

The invention relates particularly to a carding machine where slubbing is delivered from the condenser tapes to bobbins. As the package increases in diameter, the bobbin moves on a support until a position is reached where it is pushed off, and its fall is utilized to operate a bobbin change mechanism.

ROLLING CARDED FIBER FLEECE. Spinnbau GmbH. BP 757 321, Sept. 19, 1956. Through BCIRA 37: 478 (1957). (966)

Roller card for fiber fleece with at least two opposed working rollers, not in direct contact with a fluid pressure medium, and supported along their whole length by non-rotatable beams, and cooperating with a non-rolling, resilient, hydraulic pressure-transmitting member between a roller and its beam so that the end roller bearings are free from pressure.

COMB CYLINDER HALF-LAPS. T. O'Loughlin (to T. M. M. (Research) Ltd). BP 757 751, Sept. 26, 1956. Through BCIRA 37: 478 (1957). (967)

The needle bars of a comb cylinder half-lap are assembled in groups each mounted upon and independently removable from the periphery of the half-lap. Each group incorporates one or more register members to which each bar is rigidly secured, machined surfaces to the register members, and half-lap stock making it possible to fix the needles in their correct working position.

CARDING ENGINES. E. Scowcroft. BP 758 008, Sept. 26, 1956. Through BCIRA 37: 540 (1957). (968)

Carding engine having an adjustable feed roller combined with a feed plate. The roller is provided with a resilient sleeve to engage the plate.

METAL CLOTHING FOR CARDING FLATS. F. S. von Orelli (to Etablissements Platt Frères). BP 758 506, Oct. 3, 1956. Through BCIRA 37: 541 (1957). (969)

The card flat clothing comprises wires having saw-teeth, successive teeth on each wire being displaced relative to each other in the direction of the axis of the flat as well as perpendicularly. Differences from conventional flats are shown on a sheet of drawings.

COMBER LAP FORMING MACHINES. W. Thornley. BP 778 404, July 10, 1957. Through BCIRA 37: 509 (1957). (970)

Slivers are guided along two paths at different levels, the higher path being longer than the lower, and the two layers are combined to form a comber lap.

ACTUATING DEVICE FOR SLIVER CANS. J. Kaiser (to Chr. Mann Maschinenfabrik). USP 2 820 255, Jan. 21, 1958. (971)

Device for eccentrically moving a sliver can so that the sliver is deposited without twist and the can will not be damaged by the required guiding means.

CARDING ENGINES. R. Taine and J. Pelissier (France). BP 759 069, Oct. 10, 1956. Through BCIRA 37: 540 (1957). (972)

Carding unit comprising at least four card rollers, the second of which runs slowly and the others fast. The first is fed with fiber from a normal lickerin but, in order to give up its fiber to the slow roller, is covered with special transfer card clothing, e.g. of nylon bristles. The slow roller feeds the remaining fast rollers in succession; the last may be a doffer or the first fast roller of a second unit arranged in tandem.

FEEDING SLIVER FROM ROLLS TO CARDS, DRAWING FRAMES, AND SPINNING FRAMES. H. Fraser (to Douglas Fraser & Sons Ltd). BP 759 403, Oct. 17, 1956. Through BCIRA 37: 541 (1957). (973)

Partitions are used to separate rolls of sliver placed end to end in a cradle constituted by parallel rollers for feeding the sliver to cards, draw frames, and related machines. The partitions are fabricated from wrought metal with a central web and thickened edge portions.

CARD CLOTHING. V. van den Abeele (France). BP 760 202, Oct. 31, 1956. Through BCIRA 37: 541 (1957). (974)

The foundation for the card teeth is of conventional type but coated with several layers of cellular rubber compounded with fibers or the like and increasing in flexibility from the bottom to the top layer, which may consist of cellular rubber only.

FIXING NEEDLES ON CARRIERS OF COMBING MACHINES. S. Staedtler and W. Jung (Germany). BP 760 985, Nov. 7, 1956. Through BCIRA 37: 541 (1957). (975)

The needles are supplied already mounted in a material that can be molded (e.g. solder) and fixed by adhesion on the carrier rod of the comber to which they have to be fitted.

CARDING MACHINE RUBBER RUBBING APRON. L. Chiovato and G. Legnani (to Pirelli SpA). USP 2 817 879, Dec. 31, 1957. (976)

Rubbing apron with slits formed by cutting into the rubber but not removing any material from the apron.

DRAWING AND ROVING B 3

IMPROVING THE UNIFORMITY OF DRAWING FRAME VISCOSE SLIVERS. Spinnfaser AG. BP 757 583, Sept. 19, 1956. Through BCIRA 37: 479 (1957). (977)

The uniformity of viscose sliver delivered by a 4-roller system is improved by making the initial draft less than 1.30 and the second draft less than 1.05, the rest of the required total draft being effected in the third step.

DRAFTING MECHANISM. SKF Kugellagerfabriken GmbH. BP 779 375, July 17, 1957. Through BCIRA 37: 510 (1957). (978)

The invention relates to the catch mechanism for the top roller carrier arm.

DRAWING AND TWISTING OF SLIVERS OR ROVINGS. J. W. France and J. E. Hallas. BP 756 174, Aug. 29, 1956. Through BCIRA 37: 479 (1957). (979)

A sliver from a creel is passed through two or more pairs of rollers, each pair rotating about their own axes in opposite directions and about the sliver axis, which turns in the same direction for all the pairs, and the twisted and drafted sliver is then passed to a suitable receiver.

DRAFTING MECHANISM. Estirajes Balmes SA. BP 756 407, Sept. 5, 1956. Through BCIRA 37: 479 (1957). (980)

The single guiding and condensing roller for the fiber between the two pairs of drafting rollers in the Balmes system [BP 742 958] is changed to a device consisting of two short, smooth rollers or discs mounted close together on the same axle for rotation by contact with the lower drafting rollers on which they rest.

DRAFTING APRONS AND ROLLER COTS. F. W. Warren, E. V. Bratby, and J. H. Little (to Dunlop Rubber Co. Ltd). BP 756 602, Sept. 5, 1956. Through BCIRA 37: 479 (1957). (981)

Resilient material for drafting aprons, cots, and roller covers composed of a vulcanized copolymer of butadiene (40-80 parts) and methyl isopropenyl ketone (60-20), which may be blended with white factice (5-35 parts per 100).

SPINNING, WINDING, TWISTING B 4

APPARATUS FOR WINDING FILAMENT STRANDS. J. J. Rieter & Cie AG. BP 756 013, Aug. 29, 1956. Through BCIRA 37: 479 (1957). (982)

This apparatus consists of a freely rotatable yarn-receiving sleeve, a positively-driven surface winder drum, means for pressing the yarn against the drum, and magnetic means for amplifying the pressure at the start of winding and relaxing the additional pressure as winding proceeds.

MAGNETIC SUPPLY SPOOL MOUNTING ON DOUBLE-TWIST CABLING SPINDLES. Vereinigte Glanzstoff Fabriken AG. BP 756 103, Aug. 29, 1956. Through BCIRA 37: 480 (1957). (983)

Arrangement for preventing following movement and for damping vibrations of magnetically held supply spools in vertical double-twist cabling spindles.

TRANSFER TAIL MECHANISM FOR SPINNING AND TWISTING MACHINES. J. G. Taylor (to Baxter Bros. & Co. Ltd). BP 756 376, Sept. 5, 1956. Through BCIRA 37: 480 (1957). (984)

Loose member with flat upper and lower surfaces and an upturned flange, arranged between the package support and the lower flange of the package (bobbin). The member has holes or recesses for pins or projections that enter recesses in the bobbin flange, and its own flange is high enough to cover part of a circular groove in the bobbin flange into which the yarn is guided by a bar.

SUCTION NOZZLES FOR CATCHING THREAD ENDS IN SPINNING OR RELATED MACHINES. W. Reiners (Germany). BP 757 174, Sept. 12, 1956. Through BCIRA 37: 484 (1957). (985)

Suction nozzle for catching the ends of threads is given a serrated or roughened surface on the side of the mouth towards which the thread tends to move, so that the withdrawal of the thread is hindered. The surface may be provided by a strip of abrasive paper, by small teeth or incisions, or by a process such as sand-blasting.

FALSE TWISTING DEVICE. Heberlein & Co. AG. BP 757 242, 757 298, and 757 299, Sept. 19, 1956. Through BCIRA 37: 480 (1957). (986)

BALLOON CONTROL. G. M. Bracewell and K. Greenhalgh (to Tweedales & Smalley Ltd). BP 757 313 and 757 377, Sept. 19, 1956. Through BCIRA 37: 479 (1957). (987)

Means for constricting the balloon created by yarn on a rotating spindle, especially on a ring frame, with the object of reducing tension in the yarn and/or increasing the spindle speed. The constricting rings are arranged one above the maximum balloon diameter, to move in unison with the lappet rail, and one below, to move with the ring rail.

SPRING LOADING DEVICE FOR SPINNING MACHINE TWIN PRESSURE ROLLERS. Schiess AG. BP 757 817, Sept. 26, 1956. Through BCIRA 37: 542 (1957). (988)

SELF-ACTOR MULE SPINNING. Mak Maschinenbau Kiel AG. BP 758 191, Oct. 3, 1956. Through BCIRA 37: 542 (1957). (989)

In a mule without headstock, quadrant, or band drives the various movements are effected by means of three control gears working in synchronism and driven by one or several motors.

TWISTING AND SPINNING SPINDLES. G. Curts (to Courtaulds Ltd). BP 758 469, Oct. 3, 1956. (Addition to BP 692 944). Through BCIRA 37: 542 (1957). (990)

The parent invention related to a high speed spindle in which the shaft was surrounded by a tube just above which came a flexible, U-shaped ring that served as a centrifugal clutch. It is now proposed to dispense with the tube and hold the flexible ring at one end by means of a ring held fast on the shaft and fitting between the two limbs of the U, and at the other end by a shoulder on a sleeve fixed to the shaft.

TWISTING MACHINE. W. Rupf (to VEB Spinn-und Zwirnereimaschinenbau). BP 759 128, Oct. 10, 1956. Through BCIRA 37: 542 (1957). (991)

To obtain long yarn paths, of uniform length from spindle to spindle, without unduly lengthening the machine, the twisting units (bobbin, tensioner and guide, and spindle) are staggered in the vertical direction.

RING SPINNING OR RING TWISTING MACHINE DRIVE. H. Hadlich (to VEB Spinn-und Zwirnereimaschinenbau). BP 780 047, July 31, 1957. Through BCIRA 37: 510 (1957). (992)

TWISTING SPINDLES FOR CABLED YARN. Barmer Maschinenfabrik AG. BP 760 375, Oct. 31, 1956. Through BCIRA 37: 542 (1957). (993)

Yarn coming from the spindle core passes over a yarn storing wheel (1) into a storage groove (2) and thence to a yarn balloon. The surface of (1) is frusto-conical with the larger diameter adjacent to (2) and is slotted over-all, each slot communicating with the spindle core by means of a slot-like radial channel that widens outwardly and serves as a yarn guide.

DRIVING CYLINDERS OR DRUMS FOR MULE SPINNING. E. Pollard (to Flexicon Ltd). BP 760 512, Oct. 31, 1956. Through BCIRA 37: 542 (1957). (994)

The invention relates primarily to the tin roller shafts of spinning mules. The various cylinders are mounted by means of sleeves on short lengths of shaft that can be moved lengthwise, by external means, sufficiently to clear a cylinder that needs to be removed.

SPINNING MACHINES WITH RING RAILS AND ANNULAR BALLOON LIMITERS. Brematex. BP 778 637, July 10, 1957. Through BCIRA 37: 510 (1957). (995)

The annular elements do not interfere with the removal of the cops.

ADJUSTING THE COUNT, THICKNESS, OR CROSS-SECTION OF A SLIVER IN SPINNING MACHINES. F. Calzone (Italy). BP 778 831, July 10, 1957. Through BCIRA 37: 510 (1957). (996)

A pair of count rollers are interposed between the feed rollers and the drawing rollers and act through a hydraulic servocontrol to vary the speed of the feed rollers in accordance with variations in the sliver.

CLAMPING MEANS FOR HOLDING BOBBIN CORES. Vereinigte Glanzstoff Fabriken AG. BP 779 215, July 17, 1957. Through BCIRA 37: 510 (1957). (997)

The device is used for replacement of bobbin cores on spinning, twisting, or winding frames.

DEVICE FOR SPINNING, TWISTING, OR DOUBLING. C. Pujol (Spain). BP 779 773, July 24, 1957. Through BCIRA 37: 510 (1957). (998)

A centrifugal arrangement is described.

RING SPINNING OR TWISTING MACHINES. C. O. Müllenschläder. BP 780 255, July 31, 1957. Through BCIRA 37: 510 (1957). (999)

Spindles with fully wound bobbins are exchanged with spindles with empty bobbins, without interruption of the spinning or twisting process.

YARN TWISTER. P. Boillat and R. Rohrer (to Miniatur Kugellager AG). USP 2 821 062, Jan. 28, 1958. (1000)

Twisting device for operation at rotative speeds of 100,000 rpm or higher for false twisting yarns traveling at high linear speeds.

MULE SPINNING MACHINES. H. Charlesworth (to William Whiteley & Sons Ltd). BP 780 334, July 31, 1957. Through BCIRA 37: 510 (1957). (1001)

An additional drive to the delivery rollers operates each time the carriage reaches its inward limit and causes the delivery of a short length of slubbing at the beginning of the outward movement.

SLUBBING MECHANISM FOR SPINNING FRAMES. A. E. Winslow and J. H. McIlwain (to J. P. Stevens & Co.). USP 2 820 253, Jan. 21, 1958. (1002)

Mechanism for slub yarn production which actuates the speed changes smoothly and instantaneously with an infinite variation in the degree or pattern of irregularity.

SPINNING MACHINE TRAVELER CLEANER. G. C. Warren, Jr. (to Russell Mfg. Co.). USP 2 820 337, Jan. 21, 1958. (1003)

The cleaner has a concave inner surface which is positioned adjacent and outward of the ring in order to permit passage of the traveler and be close enough to remove all fibrous accumulation.

YARN CLEARER FOR WINDING AND TWISTING MACHINES. K. Klug and P. Schubert (to VEB Greizer Kammgarnwebereien). USP 2 821 008, Jan. 28, 1958. (1004)

YARNS B 5

DYED, BULKED, ELASTIC CONTINUOUS FILAMENT YARN. T. Morgan and W. A. Morris (to Brit. Nylon Spinners Ltd). BP 756 584, Sept. 5, 1956. Through BCIRA 37: 481 (1957). (1005)

Thermoplastic continuous-filament yarn (e.g. nylon) is twisted to about 5-12 turns/in., the twist is set, the yarn is wound into a "mock cake" (on a collapsible, removable mandrel), dyed, wound on to a bobbin and twisted in the same direction to about 60-100 turns/in., the high twist is set by a process of greater severity than the yarn has yet received, and finally the yarn is back-twisted to its original untwisted condition.

PRODUCTION OF EFFECT YARNS. Soc. Rhovyl. BP 758 229, Oct. 3, 1956. Through BCIRA 37: 543 (1957). (1006)

A yarn is spun from a mixture of rovings at least one of which consists, at least in part, of fibers that are more shrinkable than the remainder and are nonuniformly distributed in the yarn. The yarn is then subjected to a shrinking treatment. For example, heat-shrinkable polyvinyl chloride may be distributed among viscose staple, wool, nylon, cellulose acetate, or polyacrylonitrile fibers.

TIRE CORD ADHESIVE. W. C. Rowe and J. I. Stearns (to Firestone Tire & Rubber Co.). USP 2 822 311, Feb. 4, 1958. (1007)

Use of aqueous solution of a phenol-aldehyde resin and a blend of butadiene-styrene and vinyl-pyridine latex for adhering butyl type rubber to rayon tire cord.

PRODUCING SYNTHETIC FIBER YARNS OF A WOOLLY CHARACTER. L. M. P. M. Laffont (France). BP 760 205, Oct. 31, 1956. Through BCIRA 37: 543 (1957). (1008)

Thermoplastic threads (especially of the nylon type) are first twisted (e.g. to 2,800 turns per meter), then swollen (e.g. in 2% phenol solution at 60° C), next washed and dried, strongly twisted in the reverse direction (e.g. by 3,200 turns per meter), allowed to rest (e.g. for 24 hr), and finally brought back to about zero twist (e.g. 50 turns per meter). The product is a soft, light, transparent, woolly thread suitable for hosiery.

PROCESS FOR MANUFACTURING DECORATIVE YARNS. L. V. M. Roechegude (France). BP 760 899, Nov. 7, 1956. Through BCIRA 37: 543 (1957). (1009)

Decorative yarn produced by twisting together a twisted multi-filament superpolyamide yarn (e.g. 30 den., 10 fil., 1,300 turns per meter or 75 den., 25 fil., 1,200 turns per meter) and a nontwisted superpolyamide monofil (e.g. 15 den.) the twist being inserted in the reverse direction (e.g. 1,100 turns per meter) and set by steaming. The resultant thread is described as silky and giving the impression of being coated with a gold powder.

CARPET PILE YARN. C. C. Berry (to James Lees & Sons Co.). USP 2 821 835, Feb. 4, 1958. (1010)

Production of a plied or twisted Moresque type yarn having a braided appearance.

FABRIC PRODUCTION C

WARPING, SLASHING, YARN PREPARATION C 1

SPINDLE HEADS AND HEADPIECES FOR TUBULAR COP WINDING MACHINES. W. Dietz. BP 756 005, Aug. 29, 1956. Through BCIRA 37: 483 (1957). (1011)

In a vertical-spindle cop-winding machine, in which the spindle head piece is secured by spring and click pin engagement, the spindle head has one or more recesses for the reception of click pins. So that the slipped-on head piece may be carried round as the spindle rotates, and to prevent it from being forced off the spindle, each recess has two plane stop-faces and the bottom of the recess ascends outwards from the first of these stop-faces.

CENTERING HEAD FOR WINDING BOBBINS. W. Reiners (Germany). BP 756 717, Sept. 5, 1956. Through BCIRA 37: 484 (1957). (1012)

Centering head for mounting bobbins or pirns (between two such heads) so that the axes are accurately aligned.

METHOD OF YARN SIZING. Gebrüder Sucker GmbH. BP 779 649, July 24, 1957. Through BCIRA 37: 512 (1957). (1013)

Warp threads for weaving are treated with a heat-liquefiable dressing medium (e.g. wax or synthetic resin) and then passed through a molten-metal bath.

AUTOMATIC TORQUE CONTROL IN CONSTANT TENSION WINDERS. P. Defontenay (France). BP 756 052, Aug. 29, 1956. Through BCIRA 37: 483 (1957). (1014)

Self-regulating brake for the automatic torque control of a shaft, in order to relate the speed of rotation to the power transmitted according to a predetermined rule, consists of a rotor that rotates with the shaft, a stator that oscillates about the shaft, a fluid brake connecting rotor and stator, a valve controlling the brake, and a spring-loaded device for actuating the valve.

KNOT TYING MECHANISM FOR WINDING MACHINES. J. H. George (to Douglas Fraser & Sons Ltd). BP 756 173, Aug. 29, 1956. Through BCIRA 37: 483 (1957). (1015)

Machines for winding cones, cheeses, and similar packages are fitted with a pedal-operated link and lever system for lifting the package away from its driving drum, so that the operative may use both hands to find the ends and tie the knots.

APPLYING COLORED MARKINGS TO PAPER CONES. J. R. Spencer (to Textile Paper Tube Co. Ltd). BP 756 457, Sept. 5, 1956. Through BCIRA 37: 484 (1957). (1016)

Means for applying colored enamel or paint to the inner periphery of the open noses of paper cones and the like; for identification purposes. Surfaces with which yarn makes contact are not touched, lest the film might crack and create a rough place.

CONE HOLDERS FOR WINDING MACHINES. T. Holt (to Thomas Holt Ltd). BP 756 661, Sept. 5, 1956. Through BCIRA 37: 484 (1957). (1017)

Cone holder applicable to paper, metal, or plastic cones employs as its gripping device a rubber ring located in a groove around the conical block on which the cone is mounted.

STABLE DISPERSIONS OF SILICON DIOXIDE IN SOLUTIONS OF CELLULOSE ETHERS FOR SIZING YARNS. NV Kunstzijdespinnerij Nyma. BP 756 692, Sept. 5, 1956. Through BCIRA 37: 484 (1957). (1018)

Sodium silicate is added to the reaction mixture in the production of a cellulose ether; subsequent neutralization with acid and dilution lead to a dispersion of colloidal silica in a 0.25% solution of the ether, at a pH of about 6-8.

MACHINES FOR YARN WINDING. H. Fraser (to Douglas Fraser & Sons Ltd). BP 778 783, July 10, 1957. Through BCIRA 37: 511 (1957). (1019)

Light-weight reciprocating parts are used in cheese and cone winders; increased speed and silent running are claimed.

PROCESS FOR WINDING YARN. R. H. Speakman (to Imp. Chem. Inds. Ltd). BP 778 925, July 17, 1957. Through BCIRA 37: 511 (1957). (1020)

The process, which uses at least two cap spindles, is particularly suitable for use as a part of a spin/draw process where a quick change of bobbins is necessary.

BOBBIN HOLDING DEVICE. Industrie Werke Karlsruhe AG. BP 757 064, Sept. 12, 1956. Through BCIRA 37: 484 (1957). (1021)

To facilitate replacement of wound packages by empty ones, two bobbin holders are attached to the ends of a pivoted, elongated support so that one may be swung into the winding position while the other is in an inoperative position.

YARN WINDING MACHINE. W. Reiners (Germany). BP 757 834, Sept. 26, 1956. Through BCIRA 37: 545 (1957). (1022)

Winding machine having means for automatically replacing an empty winding-off bobbin is fitted with shearing means and a balloon catcher for cutting the thread at, or shortly before, each bobbin change, so that any remaining entangled turns on the ejected bobbin do not prevent it from falling into its receptacle.

QUICK TRAVERSE MECHANISM FOR WINDING FRAMES. R. J. Hans and M. Kühnrich (to VEB Spinn-und Zwirnereimaschinenbau). BP 757 966, Sept. 26, 1956. Through BCIRA 37: 545 (1957). (1023)

In a grooved drum for quick-traverse devices the flank of the groove is provided with radial ribs to prevent the yarn from jumping out.

BOBBIN. D. D. McGregor (to McGregor & Balfour Ltd). BP 758 031, Sept. 26, 1956. Through BCIRA 37: 545 (1957). (1024)

The bobbin has for barrel a single tube of nonmetallic material supporting at least one flange made of a ply of wood and at least one ply of shock-resistant material (fiber, plastic, or metal) held together by screws or an adhesive.

SIZING AGENT FOR TERYLENE-TYPE WARPS. J. D. H. Hall (to Imp. Chem. Inds. Ltd). BP 758 479, Oct. 3, 1956. Through BCIRA 37: 546 (1957). (1025)

Warp size composed of an aqueous dispersion of a partially water-soluble ammonium, sodium, or potassium compound of an alkyl acrylate polymer and at least one of the bases urea, thiourea, and a 2-hydroxyethyl amine (e.g. diethanolamine).

YARN PACKAGE AND MEANS FOR PREPARING. H. Buddecke. BP 759 133, Oct. 17, 1956. Through BCIRA 37: 546 (1957). (1026)

Apparatus for a package in which the yarn passes back and forth in oblong, helicoidal windings that rise partly, one above its predecessor, like the tiles of a roof, the layers are separated at one end by strips in zigzag arrangement, and the whole is covered by transparent material with a hole for pulling out an end.

SYSTEM OF BEAMING FIBERS AND FILAMENTS. F. Holt and G. Lee (to Thomas Holt Ltd). BP 760 918, Nov. 7, 1956. Through BCIRA 37: 545 (1957). (1027)

Each beamer is provided with a feeding and a reserve creel and is mounted between them on a turntable so that when one creel is exhausted the beamer may be turned to the other one.

SUPPORTING WARP THREADS. Koefoed, Hauberg, Marstrand og Helweg AS. BP 759 419, Oct. 17, 1956. Through BCIRA 37: 545 (1957). (1028)

In a method for keeping warp ends distinct, a chain of loops is formed in a yarn across the warp sheet, with each end in its own loop, and a straight supporting thread is laid along or close to the chain of loops but on the other side of the warp sheet. When working on one end, adjacent ends may be displaced considerably without losing their order, because of the elasticity of the loops.

DUST AND FLUFF REMOVAL FROM A YARN WINDING MACHINE. Maschinenfabrik Schweiter AG. BP 759 428, Oct. 17, 1956. Through BCIRA 37: 545 (1957). (1029)

The supply cone and the tensioning mechanism are enclosed in a funnel that communicates with a suction conduit. The funnel is made in sections, one of which is hinged for access to the thread and the interior mechanism.

CHANGING BOBBINS ON CREELS. W. Dietz (Germany). BP 760 616, Nov. 7, 1956. Through BCIRA 37: 546 (1957). (1030)

The invention relates to creels for twisting frames, sizing machines, multiple spooling machines, and warping frames using cross-wound bobbins that unwind from the top. It is proposed to move a bobbin, before it is fully unwound, from its main position at the corner of a square or rectangle to a secondary position at the center and to replace it by a full bobbin, the respective ends being knotted together.

APPARATUS FOR MEASURING YARN LENGTH DELIVERED. W. Fleck, J. A. Matthew, and J. L. Spencer-Smith (to Linen Ind. Research Assoc.). BP 779 548, July 24, 1957. Through BCIRA 37: 511 (1957). (1031)

A length-measuring device is driven at a speed proportional to that of the delivery mechanism of a machine in which yarn, for example, is subjected to winding, and a detector device interrupts the drive when material is not being delivered.

YARN WINDING. F. A. Smith, H. A. V. Bulleid, and R. G. C. Arridge (to Brit. Nylon Spinners Ltd). BP 780 414, 780 415, 780 416, and 780 417, July 31, 1957. Through BCIRA 37: 511 (1957). (1032)

These inventions describe processes and apparatus suitable for winding synthetic polymer filaments after stretching; the first two relate to the provision of a transfer tail, the third to threading (a portable cap-spinning apparatus is described), and the fourth to a secondary ring and traveler.

HAND OPERATED PORTABLE KNOTTER. C. R. Smith (to Mellor Bromley & Co. Ltd). USP 2 821 421, Jan. 28, 1958. (1033)

Modified Boyce knotter for forming a knot in which the end of one of the two yarns which have been tied together consists of two side by side portions (formed by cutting a loop) extending through the loop of the other yarn end.

WEAVING C 2

SHUTTLELESS LOOMS. R. Dewas (Luxemburg). BP 756 106, Aug. 29, 1956. Through BCIRA 37: 485 (1957). (1034)

Means for forming selvages on shuttleless looms comprise a weft feeder having a device (e.g. a brush with nylon bristles) facing the fell of the cloth that comes into contact with the end of the preceding pick and presses it into the new shed as the feeder enters it.

PICKERS FOR OVERPICK LOOMS. E. Haag (Germany). BP 756 498, Sept. 5, 1956. Through BCIRA 37: 485 (1957). (1035)

The bridge part of the picker is solid, requiring the strap to encircle it, and is directed upwardly from the ends to the center to such an extent that the whole width of the strap, at the moment of picking, engages the bridge in a direction inclined to the picking spindle.

WEFT FEELER. R. B. Taylor and R. Whewell (to Sulzer Frères SA). BP 756 653, Sept. 5, 1956. Through BCIRA 37: 485 (1957). (1036)

The invention relates to looms of the kind in which the shuttle race is mounted on the lay and is withdrawn from inside the shed during the beatup, and comprises elements each having an aperture that guides the shuttles and a gap leading from this aperture through which the weft pick emerges as the race is being withdrawn. To detect faulty insertion of the weft, the race is fitted with a pair of feelers that move apart only when the pick is correct. Failure of this relative movement is utilized to give an indication or operate a stop motion.

CIRCULAR LOOMS. F. F. Polnauer (to Oesterreichische Textilmaschinenfabrik G. Josephy's Erben). BP 757 319, Sept. 19, 1956. Through BCIRA 37: 485 (1957). (1037)

Circular loom with electromagnetic shuttle propulsion has a cam ring concentric with the main axis of the loom adjacent to the fell of the cloth and driven in synchronism with the heddles, and a number of beatup members that have portions engaging the cam and are projected periodically by cam action into and out of the shed along rectilinear paths.

AXMINSTER CARPET LOOMS. J. Haynes (to T. M. M. (Research) Ltd). BP 758 752, Oct. 10, 1956. Through BCIRA 37: 547 (1957). (1038)

Means for supporting the end tufts at the selvage shuttle side so that it is cut and not pushed aside as the tuft shearing knives work their way across the fabric. Usually, the end tufts have to be trimmed by hand after the carpet is removed from the loom.

LETOFF CONTROL. J. V. Stobbs. BP 760 979, Nov. 7, 1956. Through BCIRA 37: 549 (1957). (1039)

On failure of the weft a pivoted catch is automatically disengaged from a ratchet wheel associated with the letoff and setting-up motions and the return of the catch is delayed sufficiently to engage the wheel again at the point it first occupied. Thick or thin places in the fabric are thereby avoided.

WEFT STOP MOTION. D. D. Young and J. Robinson (to Urquhart Lindsay & Robertson Orchar Ltd). BP 759 872, Oct. 24, 1956. (Addition to BP 740 355). Through BCIRA 37: 548 (1957). (1040)

The loom is fitted with a trip mechanism comprising a lever operated from a control rod for the takeup mechanism and a pin moved thereby and cooperating with a slotted locking lever, so that if two successive tests by the weft fork indicate "no weft" the locking lever is locked and the setting handle is restored to an off position.

AUTOMATIC WEFT BREAKAGE STOP MOTIONS FOR SHUTTLELESS LOOMS. J. Jabouly (to Fras. Hinde & Sons Ltd). BP 760 047, Oct. 31, 1956. Through BCIRA 37: 548 (1957). (1041)

Relates to looms in which the weft is inserted in successive warp sheds from both sides of a vertical warp sheet. A detector, comprising a spring arm, is anchored near one end to a fixed part of the loom frame below a weft feed path and is held lengthwise of this path with its free end upwards so long as the weft is intact. If the weft fails, the spring arm (a length of wire) falls, depresses a plunger into a pot of mercury, and thereby closes a circuit and stops the loom.

SHUTTLE. W. Hodgkinson (to Hodgkinsons Shuttles Ltd). BP 760 330, Oct. 31, 1956. Through BCIRA 37: 548 (1957). (1042)

The shuttle has a spring clip for holding pirns by their rings when required for automatic looms and a pivoted tongue for use with ordinary looms.

REEDS FOR GAUZE LOOMS. O. Kubie. BP 760 397, Oct. 31, 1956. Through BCIRA 37: 549 (1957). (1043)

The reed has dents of a half reed alternating with the dents of a main reed, and each dent of the half reed is formed with a longitudinal slot and two eyelets, one on each side of the slot and near one end of it.

CIRCULAR LOOM PATTERNING MECHANISM. J. Jabouly (to Fras. Hinde & Sons Ltd). BP 760 419, Oct. 31, 1956. Through BCIRA 37: 548 (1957). (1044)

To weave patterned fabric, needles are arranged for transverse threading on to free warp ends so as to float with them during shedding in a path parallel to the dents, and stop means are provided for limiting the axial movement of selected needles when the free ends are moved from one shedding position to the other, the ends carrying the selected needles being thereby held back with the centered threads (those in the dents) to obtain the desired pattern.

WARP STOP MOTION. V. G. Van Colle (to Manchester Metal Works Ltd). BP 760 439, Oct. 31, 1956. Through BCIRA 37: 549 (1957). (1045)

The supporting bar for the contact strip of an electrical warp stop motion comprises twin metal strips having corresponding areas inwardly displaced by joggling and united so that the unaffected upper edges are suitably spaced for the snug reception of the insulated contact strip that rests on the upper margins of the connected joggles.

PICKING MECHANISM FOR SHUTTLELESS LOOMS. Mira Nar. Pod. BP 760 783, Nov. 7, 1956. Through BCIRA 37: 547 (1957). (1046)

The pick of weft is measured off from a supply package by a gauging drum and carried through the warp shed in a jet of gas or liquid.

SHUTTLELESS LOOM. V. M. J. Ancet and M. Fayolle (France). BP 760 843, Nov. 7, 1956. Through BCIRA 37: 547 (1957). (1047)

The loom is constructed around a vertical driving shaft. The means for operating the batten for beating up the picks are centrally arranged, the warp ends are controlled by cams from underneath the harness through direct engagement with the heddle carriers, and the rigid, rectilinear member for inserting the weft is actuated by a connecting rod and crank operating in a horizontal plane, the crank being carried by the main shaft.

BRAKE MECHANISM FOR AXMINSTER CARPET LOOM SPOOLS. E. J. Perry. BP 760 846, Nov. 7, 1956. Through BCIRA 37: 547 (1957). (1048)

Means for automatically releasing the brakes used to check free rotation of the spools mounted in the tube carrier frame when this is removed from the conveyor chains for presentation to the weave.

PICKERS FOR JUTE LOOMS. A. Haag and E. Haag (Germany). BP 778 660, July 10, 1957. Through BCIRA 37: 512 (1957). (1049)

The pickers are of light metal alloy, with buffers of an elastomer material.

ELECTRICAL CONTROL OF LOOMS. A. Mitchell (to Automatic Switching Ltd). BP 779 124 and 779 125, July 17, 1957. Through BCIRA 37: 512 (1957). (1050)

Electrical control of (1) heddles or shuttle selection, and (2) letoff, heddle operation, beatup, and takeup, is described.

SPOOL AXMINSTER CARPET LOOMS. W. Hill (to William Hill (Kidderminster) Ltd). BP 779 250, July 17, 1957. Through BCIRA 37: 512 (1957). (1051)

A gripper mechanism is provided for inserting the tufts.

WEFT CONTROL DEVICE. W. V. Gledhill and A. Chappell. BP 779 285, July 17, 1957. Through BCIRA 37: 512 (1957). (1052)

Brush-like device is described for looms having a weft grabber; the trailing weft end is held in the path of the jaws of the grabber preparatory to cutting.

TEMPLES FOR LOOMS. Drahtex Ing. Gustav Hanke GmbH. BP 779 438, July 17, 1957. Through BCIRA 37: 512 (1957). (1053)

Twin-roller temples, characterized by adjustable fabric-guiding elements disposed in front of, behind, and between the rollers, are described.

LOOM ROLLERS. J. Thwaites. BP 779 674, July 24, 1957. Through BCIRA 37: 512 (1957). (1054)

The rollers (e.g. temple rollers, cloth rollers, takeup rollers) have a grooved metal spindle and a layer of plasticized polyvinyl chloride. Good gripping on yarn or fabric is claimed.

MAINTAINING CONSTANT CLOTH TENSION DURING WINDING AND UNWINDING. D. Rothschild and H. Fazis. BP 779 691, July 24, 1957. Through BCIRA 37: 512 (1957). (1055)

The invention is particularly concerned with textile material on takeup and feed beams.

YARN GUIDE DEVICES FOR LOOM SHUTTLES. E. Honegger. BP 779 693, July 24, 1957. Through BCIRA 37: 512 (1957). (1056)

NEEDLE FACE PLATES FOR DOUBLE CYLINDER JACQUARDS. J. Hardaker and A. Firth. BP 779 896, July 24, 1957. Through BCIRA 37: 512 (1957). (1057)

PACKAGING FOR CARD CLOTHING. W. C. Eilertsen (to Howard Bros. Mfg. Co.). USP 2 822 084, Feb. 4. 1958. (1058)

KNITTING C 3

MESH-STRIPPER FOR HAND-OPERATED KNITTING MACHINES. E. Piltz (to Willy Werner Lenkeit). USP 2 817 962, Dec. 31, 1957. (1059)

NEEDLE TRANSFER CONTROL FOR CIRCULAR KNITTING MACHINES OF THE SUPERIMPOSED NEEDLE CYLINDER TYPE. A. P. Saunders (to Wildt & Co. Ltd). USP 2 820 354, Jan. 21, 1958. (1060)

WARP KNITTING MACHINE MARKER. W. Hadfield, Sr., M. Hook, R. D. Heffelfinger, and R. L. Stimmel (to Am. Viscose Corp.). USP 2 820 355. Jan. 21, 1958. (1061)

Mechanism for recording the relative feed of the threads from two or more beams in a tricot warp knitting machine.

ILLUMINATORS FOR FLAT BAR KNITTING MACHINES. C. O. Meiners, H. W. Lessing, and W. B. Lessing (to Meiners Optical Devices Ltd). USP 2 820 356, Jan. 21, 1958. (1062)

Breaks are rapidly detected by means of an illuminator with a lens system which directs a parallel beam of light of short wave length on the fabric as it emerges from the machine.

DOMESTIC HAND-OPERATED KNITTING MACHINE. P. Leleu (France). USP 2 821 072, Jan. 28, 1958. (1063)

Machine in which the carriage works in one direction for raising the needles and in both directions for lowering the needles, thus producing varied designs.

JACQUARD ATTACHMENT FOR FLAT KNITTING MACHINE. W. Mehnert (to VEB Fahrradwerk Elite-Diamant). USP 2 821 073, Jan. 28, 1958. (1064)

Attachment for jacquard patterned fabric production on machine for knitting two or more double-faced pieces of fabric independent of one another.

FOUR-FEED HOSIERY MACHINE JACK. S. R. Shelmire (to Scott & Williams Inc.). USP 2 821 846. Feb. 4. 1958. (1065)

Rocking type jacks for use in a hosiery machine in which four feeds are used in the formation of solid color patterned areas joined by interlocking loops.

METHOD OF CLOSING TOE ON CIRCULAR KNIT HOSIERY. J. L. Getaz. USP 2 821 847. Feb. 4, 1958. (1066)

FABRICS C 4

MANUFACTURE OF COLLARS. B. E. Screeton and J. G. Evans (to Bradford Dyers' Assoc. Ltd). BP 757 517, Sept. 19, 1956. Through BCIRA 37: 486 (1957). (1067)

One or both outer plies of a collar in which a thermoplastic interlining is the bonding medium is/are made from a fabric that has already been permanently glazed or polished, e.g. by impregnation with an isocyanate bisulfite compound followed by pressing and a heat treatment.

ZIPPER TAPES. J. R. Lilley (to Narrow Fabrics (Lilleys) Ltd). BP 758 533, Oct. 3, 1956. Through BCIRA 37: 549 (1957). (1068)

Tape with a beaded edge provided by a stuffer yarn or cord, or a knitted tube, held to the tape by stitching or by occasional loops of weft ends.

INSULATING TAPES. C. D. Greenhalgh and A. Melville (to Bleachers' Assoc. Ltd). BP 758 639, Oct. 10, 1956. Through BCIRA 37: 561 (1957). (1069)

An extensible fabric consisting of or containing fiber that is not thermoplastic (e.g. a cotton fabric) is produced by submitting a normal fabric to compressive shrinkage so that its length is a predetermined amount (say 20% less than it was in a relaxed state), coating it with a varnish (e.g. a linseed oil varnish), and baking it in a customary manner.

ELASTIC FABRIC. J. Verreault (to Dominion Corset Co. Ltd). BP 760 383, Oct. 31, 1956. Through BCIRA 37: 549 (1957). (1070)

Elastic fabric that may be stitched without damage is made up of (1) multi-strand elastic warp ends (e.g. elastic cored yarn with a tubular casing), (2) nonelastic warp ends laid between adjacent elastic ends, and (3) a filler interwoven with (1) and (2) in such a way that certain rows of (3) pass under and alternate rows pass over all the ends (1), while certain rows of (3) pass over and under and alternate rows pass under and over alternate ends of (2) in a 2 x 2 weave.

TWO-PLY TUBULAR FABRICS. Soc. d'Applications Gen. d'Electricité et de Mécanique. BP 759 749, Oct. 24, 1956. Through BCIRA 37: 549 (1957). (1071)

In material having an outer ply of woven textile fabric and an inner ply of paper or plastic sheet, the seamless textile tube is woven on a circular loom, and concurrently two sheets of adhesive-coated material are fed from above, caused to bend into a tube with overlapping edges as they approach the weaving ring, and then made to adhere to the textile tube by applying heat and pressure.

WARM AND WATERPROOF COMPOSITE FABRIC. J. Kagan. BP 760 477, Oct. 31, 1956. Through BCIRA 37: 550 (1957). (1072)

One ply of raised fabric, woven or knitted from yarn of low twist containing wool, attached at certain points to a second ply of waterproof woven fabric by means of an adhesive or bonding agent with air channels between the plies.

CURTAIN HEADING TAPE. R. French and M. Stephenson (to Thomas French & Sons Ltd). BP 760 830, Nov. 11, 1956. Through BCIRA 37: 549 (1957). (1073)

Curtain heading tape in which the pockets for hooks come alternately on the front and the back of the main tape. Some at least of the warp ends for the pockets are shed in pairs and different groups of paired ends are used for the front and back pockets. Weaving diagrams are given.

SEAMING OF THERMOPLASTIC SHEET MATERIAL. C. F. Brouncker. BP 760 920, Nov. 7, 1956. Through BCIRA 37: 550 (1957). (1074)

Means for joining the edges of woven or nonwoven nylon or other thermoplastic sheet by fusion, particularly in the production of bias binding.

LOCK KNOT FOR NETTING. Dominion Textile Co. Ltd. BP 779 107, July 17, 1957. Through BCIRA 37: 512 (1957). (1075)

ZIPPER TAPES. J. R. Lilley (to Narrow Fabrics (Lilleys) Ltd). BP 779 279, July 17, 1957. Through BCIRA 37: 513 (1957). (1076)

The thickened edge is of a knitted tube with a stuffer cord.

MANUFACTURE OF SHEET MATERIALS COMPOSED OF ADHESIVELY BONDED FIBERS. Bergin GmbH. BP 780 064, July 31, 1957. Through BCIRA 37: 509 (1957). (1077)

The card web is sprayed with bonding agent as it is built up into a lap.

METHOD AND APPARATUS FOR MAKING A HOOKED PILE FABRIC. K. Förster (Germany). USP 2 820 277, Jan. 21, 1958. (1078)

The ends of thermoplastic raised threads in a foundation fabric are heated and simultaneously subjected to axial pressure by means of a faceted pressure roller so that they form a hooked shape.

HIGH AND LOW PILE CARPETS. C. H. Masland (to C. H. Masland & Sons). USP 2 820 483 and 2 820 484, Jan. 21, 1958. (1079)

Weaving carpets over a set of wavy pile wires with the high and low points on the respective wires arranged according to a contour pattern or a random distribution to achieve variation in the pile height in the same transverse row.

NONWOVEN FABRIC. C. Harmon and C. H. Plummer (to Chicopee Mfg. Corp.). USP 2 820 716, Jan. 21, 1958. (1080)

Nonwoven fabric formed from a loosely assembled fibrous web by distributing dry charged particles of an adhesive material in a predetermined pattern by means of electric lines of force, softening the particles to bring them in closer contact with the fibers, and hardening them to form a fabric.

IRONING BOARD COVER CLOTH. W. C. Hitchcock and G. C. Holroyd (to U.S. Rubber Co.). USP 2 820 721, Jan. 21, 1958. (1081)

Nonwoven fabric consisting of felted asbestos fibers bonded with a synthetic resin and coated with polyvinyl acetal resin to form a surface resistant to linting and heat.

SYNTHETIC FIBER PAPERMAKERS FELT. J. D. Skeer (to F. C. Huyck & Sons). USP 2 821 771, Feb. 4, 1958. (1082)

Method of making papermakers felt from yarn composed entirely of crimped thermoplastic fibers consists of immersing a tightly woven fabric in hot water, to cause shrinkage in the transverse direction of the fabric, and heating to set the fibers in their crimped condition.

RESIN TREATED FILTER FELT. P. E. Merrifield (to Armstrong Cork Co.). USP 2 822 298, Feb. 4, 1958. (1083)

Full flow filter felt treated with the resinous reaction product of acrolein and a reducing sugar may be prepared on a standard papermaking machine.

FINISHING AND CHEMICAL PROCESSING D

CHEMICAL PROCESSES D 1

ORNAMENTATION OF FABRICS. C. S. Parker and A. Melville (to Bleachers' Assoc. Ltd and Bradford Dyers' Assoc.). BP 758 005, Sept. 26, 1956. Through BCIRA 37: 561 (1957). (1084)

Shrinkage effects of the type of crimps, puckers, and blisters, in stripes or other designs and patterns are produced by subjecting the fabric to compressive shrinkage over its whole width beyond its normal dimensionally-stable length and to such a degree that it will extend when wetted. The shrinkage is fixed in selected regions, e.g. by coating it with a film of a heat-curable urea-formaldehyde condensate, and extension is induced in other regions by wetting.

WASHING MACHINE FOR FABRICS IN ROPE FORM. M. Decloux (Belgium). BP 757 921, Sept. 26, 1956. Through BCIRA 37: 554 (1957). (1085)

The fabric is passed through a hollow cylinder which not only arranges it in rope form but also serves to perform the washing operation, the cylinder being supplied under regulated pressure with the wash liquor or water which plays radially on the fabric before it reaches the mangle.

MILDEWPROOFING COMPOSITION. Ciba Ltd. BP 758 355, Oct. 3, 1956. Through BCIRA 37: 562 (1957). (1086)

The mildewproofing agent (for cotton and wool yarns and fabrics) is the copper, silver, or other heavy metal complex of 8-hydroxyquinoline emulsified with a melamine-formaldehyde partial condensate. The yarn or fabric is impregnated, dried, and heated to complete the formation of the resin.

COTTON CREASEPROOFING. D. A. Derrett-Smith and R. W. Kinkead (to Linen Ind. Research Assoc.). BP 758 391, Oct. 3, 1956. Through BCIRA 37: 560 (1957). (1087)

Cotton (fiber, yarn, or fabric) is impregnated with a synthetic resin precondensate (e.g. urea-formaldehyde or methylated melamine-formaldehyde), dried, and subjected at about 100° C to saturated steam containing formaldehyde vapor.

COATING CELLULOSE ACETATE WITH POLYVINYL CHLORIDE. H. Ewing and A. Mellor (to Brit. Celanese Ltd). BP 758 512, Oct. 3, 1956. (Addition to BP 658 180). Through BCIRA 37: 561 (1957). (1088)

The polyvinyl chloride is applied as a dispersion in a "cyclic plasticizer" of the type of methyl cyclohexyl phthalate.

IMPREGNATING FABRICS WITH POLYVINYL COMPOUNDS. W. H. Hogg and T. R. Evans (to Dunlop Rubber Co. Ltd). BP 760 115, Oct. 31, 1956. Through BCIRA 37: 560 (1957). (1089)

The polyvinyl compound is dissolved in a plasticizer. A typical formula is: polyvinyl chloride 20 parts, tricresyl phosphate 50, dioctyl phthalate 50, and lead stearate 0.5; the mixture is liquid at 100° C and a gel at about 25° C.

MECHANICAL FINISHING OF CELLULOSIC MATERIALS. A. Lowe and G. Williams (to Imp. Chem. Inds. Ltd). BP 760 598, Nov. 7, 1956. Through BCIRA 37: 560 (1957). (1090)

Mechanical properties of fabrics, paper, etc., are modified by treatment with a hydrazide (e.g. the dihydrazide of sebacic acid), nitrous acid, and, preferably, formaldehyde, the agents being applied in such forms that their active products are liberated only within the material. After impregnation the material is dried, baked, and given an appropriate mechanical finish. The effects include enhanced dimensional stability of viscose fabrics, increased wet and bursting strengths of paper, permanent glaze on cotton fabrics, and water repellency in cotton gabardines.

REDUCING CHLORINE DIOXIDE FORMATION IN ACID CHLORITE BATHS. Farbwerke Hoechst AG. BP 760 206, Oct. 31, 1956. Through BCIRA 37: 554 (1957). (1091)

Chlorite bleach liquors are made up with an ammonium salt (e.g. chloride, chlorate, nitrate, sulfate, or acetate) and a surface active agent of the type of oleylsarcoside or oleylmethyltaurine.

ROLLERS FOR SUPPLYING ANTISTATIC AGENTS. J. A. Medley (to Wool Inds. Research Assoc.). BP 760 394, Oct. 31, 1956. Through BCIRA 37: 546 (1957). (1092)

The rollers are made of or surfaced with a porous metal (e.g. sintered iron, such as Oilite) which holds the antistatic agent and furnishes a constant film of the liquid to textile material passing over the roller.

SHAPING HOSIERY. Etablissements Maurice Heliot. BP 760 447, Oct. 31, 1956. Through BCIRA 37: 562 (1957). (1093)

In a method of shaping socks by heating and then steaming, followed by drying, on a set of forms in a chamber, a centrifugal fan is fitted to the chamber so as to blow air on to the socks during the preheating and drying stages and to provide suction at the end of the steaming operation.

TREATMENT OF SYNTHETIC FILAMENTS FOR FISH NETS. R. M. Cowper (to J. & P. Coates Ltd). BP 760 837, Nov. 7, 1956. Through BCIRA 37: 546 (1957). (1094)

Yarns of the polyamide, polyester, and acrylic groups are coated with a solution or suspension of a synthetic resin (e.g. polyvinyl acetate, N-methylmethoxynylon-66, or a copolymer of nylon-6 and -66), dried, and heated to about 350-450° C. Fish nets knitted from such yarn may be dyed and used without much change in the size of the mesh.

MAKING POLYAMIDE POLYMER PRODUCTS INFUSIBLE. NV Onderzoekingsinstituut Research. BP 779 304, July 17, 1957. Through BCIRA 37: 522 (1957). (1095)

Polyamide fibers, yarns, or fabrics are treated with a solution of a chromium compound, a solution of tannin, and a solution of tartar emetic.

ANTISTATIC AGENT. Boehme Fettchemie GmbH. BP 779 491, July 24, 1957. Through BCIRA 37: 512 (1957). (1096)

Synthetic polymers, e.g. nylon, fibers, yarns, fabrics, or garments, are impregnated with a composition containing polyalkylene wax and a neutralized sulfonated fatty-acid ester.

LIQUID APPLICATOR FOR THREAD ADVANCING REELS. T. S. Mayner (to Industrial Rayon Corp.). USP 2 820 358, Jan. 21, 1958. (1097)

Device for forming and applying a thin sheet or film or liquid to the periphery of an interdigitating bar type rotating reel.

PRODUCTION OF CELLULOSE OR CELLULOSE-CONTAINING MATERIAL HAVING ACID PROPERTIES. H. Pauling (Germany). BP 779 820, July 24, 1957. Through BCIRA 37: 521 (1957). (1098)

Cellulose wadding is oxidized by passing nitrogen dioxide through it at low pressure and at moderate temperature; the oxycellulose is claimed as a filter material, e.g. for cigarettes.

PRODUCTION OF POLYVINYL CHLORIDE FILMS UPON TEXTILE FABRICS. D. G. H. Baxter and I. H. Robinson (to Britiona Chemicals Ltd). BP 780 244, July 31, 1957. Through BCIRA 37: 521 (1957). (1099)

BLEACHING COTTON WITH HYDROGEN PEROXIDE. P. Feldmann (to Food Machy. & Chem. Corp.). USP 2 820 690, Jan. 21, 1958. (1100)

Deposits occurring up until now in continuous peroxide bleaching systems can be avoided by the presence of a calcium or metal orthophosphate stabilizer, the stabilized solution being buffered to a pH of 9 to 11 with an alkali borate or orthophosphate buffer.

HYDROLYSIS OF CYANOETHYLATED COTTON. J. R. Stephens and L. Rapoport (to Am. Cyanamid Co.). USP 2 820 691, Jan. 21, 1958. (1101)

Carboxyethyl substituted cyanoethylated cotton is prepared by a two stage hydrolysis: an alkaline hydrogen peroxide hydrolysis followed by a mild, acidic hydrolysis.

MECHANICAL FINISHING OF RAYON FABRICS. A. Brookes and A. R. Smith (to Brit. Industrial Plastics Ltd). USP 2 820 715, Jan. 21, 1958. (1102)

Washfast mechanical effects and finishes on regenerated cellulose fabrics are achieved by impregnating the fabric with an aqueous solution of a water-soluble lower alkyl ether of dimethylol urea and a curing agent, removing the excess solution, partially drying, mechanically finishing, and heating to insolubilize the resin.

PROCESS FOR WATERPROOFING FABRICS. R. B. Trusler and B. Sutton (to Davies-Young Soap Co.). USP 2 820 719, Jan. 21, 1958. (1103)

Static electricity, which inhibits the waterproofing process, is removed from the fabric to be treated by application of a conductive solution consisting of a quaternary ammonium compound dissolved in petroleum naphtha. The treated fabric, which is now electrically conductive, is immersed in a waterproofing composition containing a petroleum solvent, paraffin wax, and resin.

ANTISTATIC COMPOSITION. J. K. Sneed (to E.I. du Pont de Nemours & Co.). USP 2 820 724, Jan. 21, 1958. (1104)

Textile fabrics are given antistatic properties through treatment with a composition containing a cross-linking oxygen-containing polyamide, a cross-linking catalyst, and a water-dispersible polyether. When the treated fabric is dried, cured, and washed, it carries a cross-linked derivative of the polyamide having antistatic properties and resistant to washing and drycleaning.

RECOVERY OF WOOL WAX FROM WOOL SCOUR LIQUOR FROTHS. L. F. Evans and W. E. Ewers (to CSIRO, Australia). USP 2 820 803, Jan. 21, 1958. (1105)

Wool scouring liquor froth resulting from the use of nonionic detergents of the condensed ethylene oxide type (e.g. Lissapol N) or anionic detergents of the sulfated long chain alcohol type (e.g. Teepol) are treated with sodium or potassium phosphate dispersing agents, heated to 85° C, and centrifuged to separate out the wool wax.

INCREASING THE FLUFFINESS OF LANDFOWL FEATHERS. E. R. Frederick (to U.S. Secretary of the Army). USP 2 821 456, Jan. 28, 1958. (1106)

Land fowl feathers with increased fluffiness and filling power are produced by washing and drycleaning them to remove dirt and foreign matter, immersing them in a solution of magnesium silicofluoride, washing to remove uncombined silicofluoride, and drying, fluffing, and electrostatically charging them.

HEAT STABILIZING POLYETHYLENE FABRIC. V. L. Erlich (to Reeves Bros.). USP 2 821 457, Jan. 28, 1958. (1107)

Polyethylene fabrics of improved shrink resistance, strength, appearance, and other physical properties are obtained by incompletely annealing oriented polyethylene filaments to give them considerable residual shrinkage, converting the filaments to grey fabric, and heating the fabric under tension at a temperature close to but below the melting point of the polymer.

RODENT REPELLENT CORDAGE IMPREGNATED WITH DODECYL ALCOHOL. J. P. Barrett and E. W. Segebrecht (to Armour & Co.). USP 2 822 295 and 2 822 296, Feb. 4, 1958. (1108)

ROTPROOFING CELLULOSIC MATERIALS. D. X. Klein, J. P. Scullin, and A. J. Deinet (to Heyden Newport Chem. Corp.). USP 2 822 297, Feb. 4, 1958. (1109)

Cellulosic materials are made resistant to decay and degeneration when in contact with the soil by impregnation with a substituted salicylaldoxime.

MICROBICIDAL COMPOSITION. E. Bretscher and H. Hemmi (to Saul & Co.). USP 2 822 312, Feb. 4, 1958. (1110)

Cellulose fabric resistant to attack by microorganisms is obtained by impregnation with an organic mercury compound, e.g. phenyl mercury acetate, and, as a fixing agent for the latter, the water soluble polymeric condensation product of diethylenetriamine and dicyandiamide.

DYEING AND PRINTING D 2

STEAMING APPARATUS FOR PRINTED TEXTILES. R. P. Higginbottom. BP 779 149, July 17, 1957. Through BCIRA 37: 521 (1957). (1111)

Three-phase heat exchange unit, for use in combination with an air-free enclosure, is described.

DYEING TERYLENE TEXTILES AND FOILS. Ciba Ltd. BP 757 869, Sept. 26, 1956. Through BCIRA 37: 559 (1957). (1112)

Materials of the Terylene group are dyed by the dispersion method with anthraquinone dyes that contain (1) a sulfur system not imparting solubility in water, e.g. an alkylmercapto, alkylsulfone or sulfonamide group, and (2) preferably at least one amino group.

DYEING ACETATE RAYON AND POLYAMIDE FIBERS WITH DISPERSE DYES. Farbenfabriken Bayer AG. BP 758 462, Oct. 3, 1956. Through BCIRA 37: 559 (1957). (1113)

The examples include the following: 1-amino-4-(p-aminocyclohexylamino)-anthraquinone (violet-blue), 1:4-bis-(p-hydroxycyclohexylamino)-anthraquinone (blue), and related products.

DYEING MANMADE FIBERS. Raduner & Co. AG. BP 758 745, Oct. 10, 1956. Through BCIRA 37: 558 (1957). (1114)

To enhance the affinity for dyes of polyacrylonitrile, polyamide, and polyester fibers (Orlon, Acrilan, Dynel, and nylon), the materials are exposed to the action of a strong base (e.g. caustic soda) in a nonaqueous medium (e.g. glycol) the duration, temperature, and concentration being adjusted to produce merely a surface action.

COLOR-PATTERNED EFFECTS. R. Bentham, C. Fearnley, and G. Landells (to Bradford Dyers' Assoc.). BP 759 595, Oct. 24, 1956. Through BCIRA 37: 560 (1957). (1115)

Color-patterned effects (e.g. color on white or white on color) are produced on synthetic nitrogenous textiles (e.g. nylon, Orlon, and Dynel) by the use of localized pressure and a chemical resist. The pressure is applied to the wet material, with heat if desired, and its effect is to counteract the resist. Resist agents claimed are chlorination, a mono- or poly-isocyanate or isothiocyanate, an organic sulfur compound, and a synthetic tanning agent.

COLOR-PATTERNED EFFECTS. R. Bentham, C. Fearnley, and G. Landells (to Bradford Dyers' Assoc.). BP 759 625, Oct. 24, 1956. Through BCIRA 37: 560 (1957). (1116)

The process covered by BP 759 595 is applied to natural or regenerated protein textiles other than silk.

DYEING CELLULOSIC TEXTILES WITH INORGANIC METALLIC COMPOUNDS. P. F. Crosland (to Crosland & Pickstone Ltd). BP 778 415, July 10, 1957. Through BCIRA 37: 520 (1957). (1117)

The shade of cellulosic textile materials impregnated with mineral oxides (e.g. mineral khaki) is deepened and made redder by heating the dry dyed material to a temperature of 120° C or higher for a few minutes.

DRIVING MECHANISMS FOR DYE JIGGERS. H. B. Nielsen (Sweden). BP 778 668, July 10, 1957. Through BCIRA 37: 521 (1957). (1118)

The driving mechanism has discs and a friction roller.

CONTINUOUS DYEING OF VEGETABLE FIBERS WITH VAT DYES. R. S. E. Hannay and W. Kilby (to Standfast Dyers & Printers Ltd). BP 778 945, July 17, 1957. Through BCIRA 37: 520 (1957). (1119)

Economy in dyestuff cost is attained by having a high alkali concentration, e.g. 200 g/l.

PRODUCING WATER-INSOLUBLE AZO DYESTUFFS ON CELLULOSIC FIBERS. Farbwerke Hoechst AG. BP 779 009, July 17, 1957. Through BCIRA 37: 520 (1957). (1120)

Loose materials, yarn packages, or piece goods of cotton, or viscose, or cuprammonium rayon are treated with a grounding solution containing an orthohydroxycarboxylic acid arylide, an equal quantity of diazotized amino-azo compound is used, and the dyeing is developed with a weak acid, e.g. acetic acid.

TENSIONING MECHANISMS FOR MOVING CLOTH DURING PRINTING. W. F. Huck, A. J. Albrecht, and S. N. Weteman (to Huck Co.). BP 779 686, July 24, 1957. Through BCIRA 37: 521 (1957). (1121)

DYEING POLYESTER FIBERS. Farbenfabriken Bayer AG. BP 779 803, July 24, 1957. Through BCIRA 37: 520 (1957). (1122)

A hydroxyanthraquinone is used as dyestuff.

FUGITIVE TINTING. F. Singleton (to T.M.M. (Research) Ltd). BP 779 905, July 24, 1957. Through BCIRA 37: 509 (1957). (1123)

Apparatus, incorporating a transfer roller, for applying a fugitive dye to a lap, before carding, is described.

MANUFACTURE OF DYED, CRIMPED SYNTHETIC FIBER YARNS. Heberlein & Co. AG. BP 780 227, July 31, 1957. Through BCIRA 37: 520 (1957). (1124)

Dyeing is effected concurrently with the crimping process; e.g. yarn is dyed, twisted, and steamed.

TREATMENT OF SYNTHETIC FIBERS AND FABRICS. NV De Bataafsche Petroleum Maatschappij. BP 780 288, July 31, 1957. Through BCIRA 37: 520 (1957). (1125)

Polyacrylic, polyester, polyamide, polyvinyl, or cellulose ester materials when impregnated with a polyepoxide have improved dye affinity.

QUICK PROCESS FOR DYEING WOOL WITH COMPLEX HEAVY METAL MONOAZO AND AZO METHINE DYESTUFFS. A. Binder and H-R. Hirsbrunner (to J. R. Geigy AG). USP 2 817 575, Dec. 24, 1957. (1126)

ICE-COLORS IN AZOIC PRINTING WITH NEUTRAL STEAM. K. Breig and E. Glietenberg (to Farbenfabriken Bayer AG). USP 2 822 234, Feb. 4, 1958. (1127)

Combinations of dihalogeno-alkyl- or dihalogeno-alkoxy anilines with 2-alkylamino-5(4)-sulfobenzoic acids in the presence of an alkali yield ice-colors on cotton and regenerated cellulose fibers by neutral steaming.